

# **ALASKA READING**

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## **PARTICIPANT'S GUIDE**

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# ALASKA READING

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## Volume I: Introduction Part 1: Introduction to the Course

### PARTICIPANT GUIDE

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#### OBJECTIVES

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By the end of this session, participants will be able to:

- Identify concerns about reading in Alaska and the data that supports the concerns.
- Understand the NCLB Act and its impact on public schools. (Reading First)
- Understand the background and history of recent reading in AK.
- Identify the standards movement in the early '90s.
- Identify the adoption of Alaska Performance Standards.
- Become familiar with Alaska Reading Performance Standards and Grade Level Expectations in Reading. (Facilitator should be familiar with these documents)
- Understand the Quality Schools Initiative.
- Become familiar with the National Reading Panel's research.
- Identify the AK Reading Matrix in the development of this series.
- Understand the Competent Reader Model.

#### VIDEO SUMMARY

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*Note: The following material contains the same information as the video. It is included to help the facilitator better understand the content.*

Kit Roberts, an Alaskan educator, gives a brief summary of Alaska Reading, and introduces former Commissioner Jerry Covey. He will explain the standards movement which began in the early 1990's when he was Alaska Commissioner of Education.

Next is former Commissioner of Education and Early Development, Shirley Holloway. She discusses the continuation of Alaska standards by discussing the addition of Alaska Performance Standards and Quality School Initiative.

Ms. Roberts then introduces the current Alaska Commissioner of Education, Roger Sampson. Mr. Sampson discusses his concerns after viewing reading scores across the State. He will also explain the development of this class.

Ms. Roberts then introduces Linnea Ehri, Professor of Graduate Center, City University, New York. Dr. Ehri recently served on the National Reading Panel, and will explain the National Reading Panel research, and the development of the Alaska Reading Matrix, developed from that report.

Ms. Roberts gives a brief summary of reading problems in today's schools, and further explains key points to include the Component Reading Model and what a competent reader is.

# FACILITATOR SYLLABUS & PARTICIPANT NOTE TAKING-GUIDE

## SESSION I: INTRODUCTION TO ALASKA READING

### I. Kit Roberts, an Alaskan educator.

*Introduces Alaska Reading and gives a brief history of reading in Alaska.*

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### II. Jerry Covey: Former Commissioner of Education (1991-1995)

*History of standards and reading in the State of Alaska.*

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### III. Shirley Holloway: Former Commissioner of Education/Current State Board Member (1995-1999, 2001-2003)

*Performance Standards and Quality Schools.*

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### IV. Roger Sampson: Commissioner of Education (2003-Present)

*Reading in Alaska for all students, concerns and data driven instruction.*

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### V. Linnea Ehri: (National Reading Panel Member)

*National Reading Panel and Alaska Reading Matrix.*

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Please turn the page for beginning of Ehri note taking guide.

Six components in the matrix that students need to learn. (Alaska Reading has added a sixth component of writing/constructing text).

1. Alphabetic Foundations

- a. Phonemic Awareness \_\_\_\_\_
- b. Letter-Sound (Phonics) \_\_\_\_\_
- c. Early Spelling (Phonics) \_\_\_\_\_

2. Word Study:

- a. Decoding Words \_\_\_\_\_
- b. Reading Sight Words from Memory \_\_\_\_\_
- c. Reading Words by Analogy \_\_\_\_\_
- d. Predicting Words \_\_\_\_\_
- e. Spelling Words \_\_\_\_\_

3. Fluency:

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4. Vocabulary:

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5. Language Comprehension:

- a. Listening to text \_\_\_\_\_
- b. Reading text \_\_\_\_\_

6. Writing

- a. Handwriting \_\_\_\_\_
- b. Constructing text \_\_\_\_\_

Six Components in the matrix that teachers need in order to teach the above components.

1. Understand the structure of language for each component.

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2. Understand the learner processes that are acquired for each component.

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3. Know specific teaching methods to help students acquired each component

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4. Know how to assess whether students are acquiring each component

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5. Know tactics for student motivation to learn the components.

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6. Understand instruction that creates linkages between various components so that all can be integrated in student learning.

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**Practice Activity:** Review and check for understanding.

VI. Kit Roberts (M.A., CCC-SLP)

—*Competent Reader Model.*

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A. A competent reader can be described as someone who reads accurately, fluently, and is able to get meaning from print.

1. Accuracy

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2. Fluency

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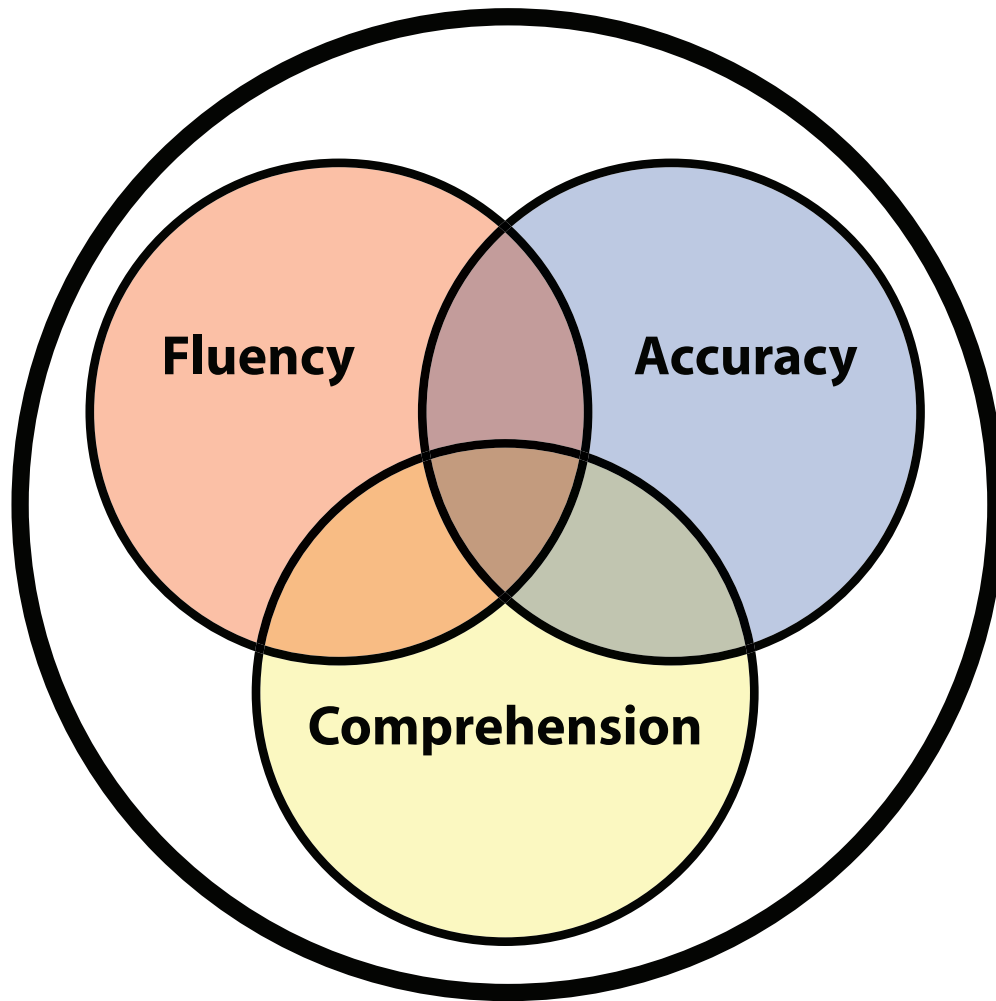
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3. Comprehension

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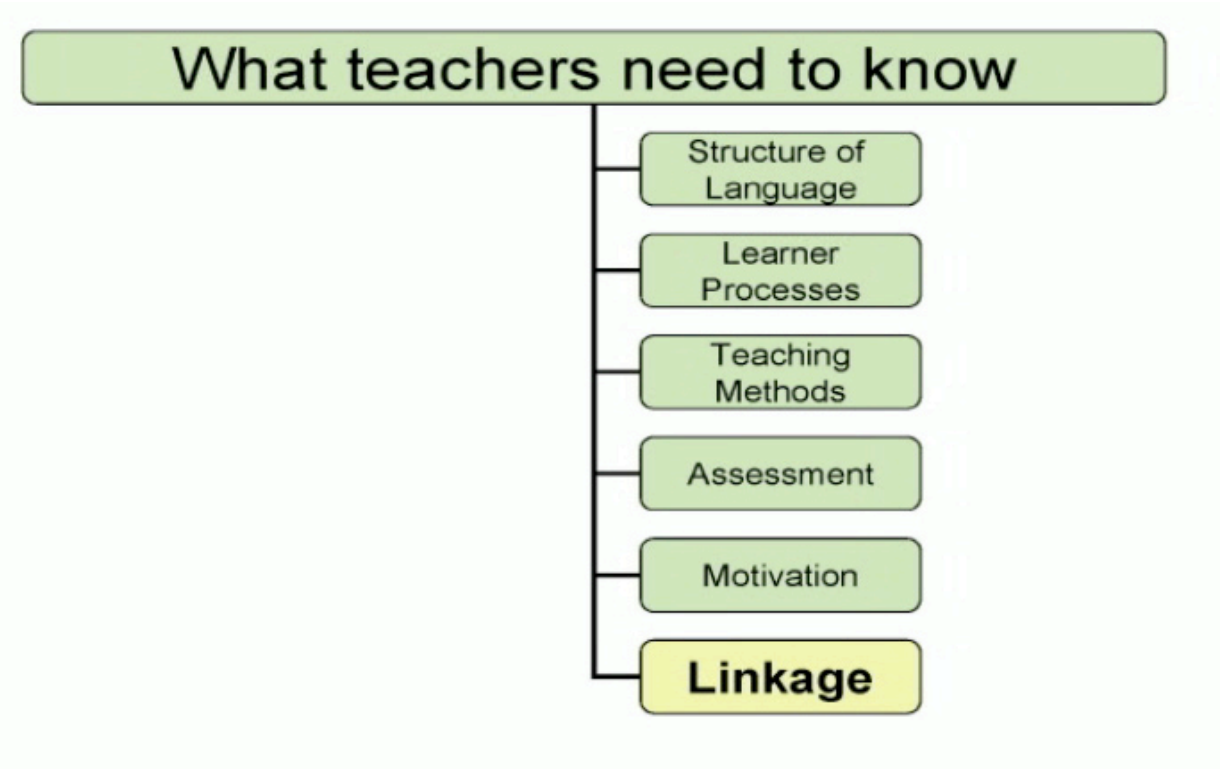
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# Competent Reader Model



(NESS, Inc.)

**APPENDIX B: MATRIX**



Matrix Prototype: Alaska Reading, Department of Education and Early Development.

What Teachers Need to Know						
Components of Reading	Alphabetic Foundations	Word Study	Fluency	Vocabulary	Comprehension	Writing
	Structure of Language					
	Learner Processes					
	Teaching Methods					
	Assessment					
	Motivation					
	Linkage to Other Reader Acquisitions					



## APPENDIX C: SUPPORT MATERIALS

For a complete list of the following: Alaska Content Standards, Alaska Performance Standards, and Grade Level Expectations, visit: <http://www.eed.state.ak.us/>

For information on the National Reading Panel Report, refer to:

<http://www.nationalreadingpanel.org/>

For information on the Reading First Program, visit:

<http://www.ed.gov/programs/readingfirst/index.html>

<http://www.aft.org/pubs-reports/downloads/teachers/rocketsciphotos.pdf>

## SCIENTIFIC-BASED RESEARCH AS DEFINED BY THE NATIONAL READING PANEL

The National Reading Panel (NRP) issued a report in 2000 that responded to a Congressional mandate to help parents, teachers, and policymakers identify key skills and methods central to reading achievement. The Panel was charged with reviewing research in reading instruction (focusing on the critical years of kindergarten through third grade) and identifying methods that consistently relate to reading success.

The panel reviewed more than 100,000 studies. Through a carefully developed screening procedure Panel members examined research that met several important criteria:

- The research had to address achievement of one or more skills in reading. Studies of effective teaching were not included unless reading achievement was measured.
- The research had to be generalized to the larger population of students. Thus, case studies with small numbers of children were excluded from the analysis.
- The research needed to examine the effectiveness of an approach. This type of research requires the comparison of different treatments, such as comparing the achievement of students using guided repeated reading to another group of students not using that strategy. This experimental research approach was necessary to understand whether changes in achievement could be attributed to the treatment.
- The research needed to be regarded as high quality. An article or book had to have been reviewed by other scholars from the relevant field and judged to be sound and worthy of publication. Therefore, discussions of studies reported in meetings or conferences without a stringent peer review process were excluded from the analysis.

The NRP challenges educators to consider the evidence of effectiveness whenever they make decisions about the content and structure of reading instruction programs.

Put Reading First: The Research Building Blocks for  
Teaching Children to Read Kindergarten Through Grade 3  
*Partnership for Reading: US Dept. of Education; NICHD; National Institute for Literacy*  
<http://www.nifl.gov/>

# ALASKA READING

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## Volume I: Introduction

### Part 2: Data, Facts, and Statistics on Reading, the Competent Reader, and Scientific-Based Reading Instruction

#### PARTICIPANT GUIDE

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##### OBJECTIVES

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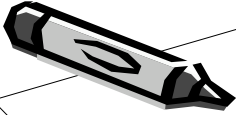
- Understand data, facts and statistics on reading as identified in research. (Learner Process)
- Review the necessary reading components of the reading matrix and CRM. (Learner Process)
- Identify three sensory systems needed in reading. (Learner Process)

##### VIDEO SUMMARY

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Note: This session more fully explains reading research, competent reader model, and multi-sensory instruction. The video presentation portion of this section is a video slideshow located on the DVD. These slides are the same ones featured in the participant note-taking guide. The information is presented by Kit Roberts, M.A., CCC-SLP in the syllabus\* and the facilitator is to lead a discussion based on this syllabus. Readings are also included to further enhance facilitator knowledge.

**PARTICIPANT NOTE-TAKING GUIDE**



Data, Facts and  
Statistics  
on Reading

Kit Roberts, M.A., CCC-SLP



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I. Alaskan Educators bring  
hope to Alaska's children.

A. Number of school age  
children, with poor literacy  
skills, have reached crisis  
proportion in America.



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*Continued...*

1). 38% in grade four could not read at  
grade level. *(Phillips, 2001)*

2). Up to 70% of children in poverty  
cannot read simple basic text. *(Lyon, 2001)*

3). In AK one in three students in  
grades 3-10 do not test proficient.  
*(AK Department of Education and Early Development)*



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## PARTICIPANT NOTE-TAKING GUIDE

*Continued...*

4.) Estimate 20 million school age students fail to read. (NICHD)

5.) 2.3 million children will qualify for special education under learning disability. (Lyon, 2001)

6.) Children with poor literacy are condemned to low academic success and limited economic success. (Center for Educational Statistics, 1998)


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II. Reading disabilities are the most prevalent classification of learning disability and account for the largest percentage of students identified disabled in public schools.

(Stanovich, 1998)


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**A. SCHOOL REFORM**

Resulted in No Child Left Behind and Reading First Acts. Asks the following:

1. How often do we test students?
2. Which children?
3. What must they learn to be able to read?
4. When do they need to learn it?
5. How should instruction be provided?
6. By Whom?
7. How long?
8. What materials?


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## PARTICIPANT NOTE-TAKING GUIDE

### III. Failure to Read By Grade Four

.....Continues with illiteracy  
into adulthood.

Appropriate instruction and intervention,  
could reduce the 38% of American  
children who cannot read in grade 4 to  
6% or less. (Lyon, 2001).



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*Continued...*

A. Investigations into the cause and  
treatment of literacy disorders have  
received unprecedented funding in the  
recent past, generating solid evidence  
that clarifies successful methodologies  
and intervention techniques to address  
literacy development for both average  
and low performing students.



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*Continued...*

B. Extensive research supported by  
NICHD has demonstrated that the  
majority of children who fail to develop  
reading skills can become fluent  
readers with interventions that provide  
"systematic, explicit, and intensive  
instruction in 5 key components.



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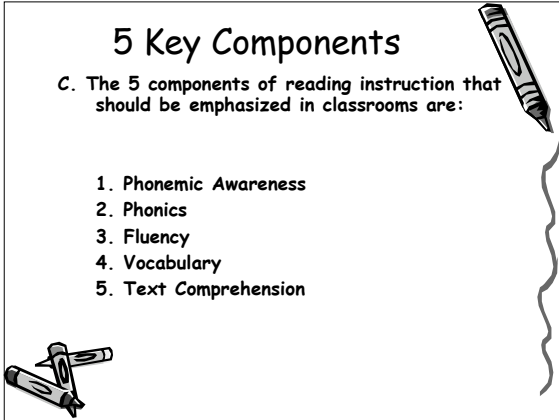
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## PARTICIPANT NOTE-TAKING GUIDE

**5 Key Components**

C. The 5 components of reading instruction that should be emphasized in classrooms are:

1. Phonemic Awareness
2. Phonics
3. Fluency
4. Vocabulary
5. Text Comprehension



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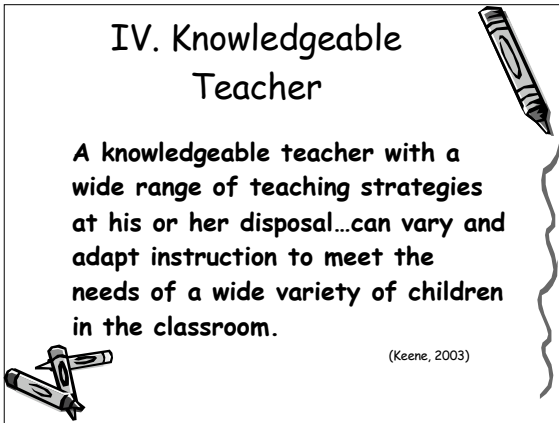
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**IV. Knowledgeable Teacher**

A knowledgeable teacher with a wide range of teaching strategies at his or her disposal...can vary and adapt instruction to meet the needs of a wide variety of children in the classroom.

(Keene, 2003)



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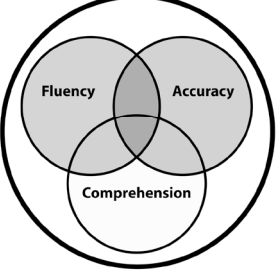
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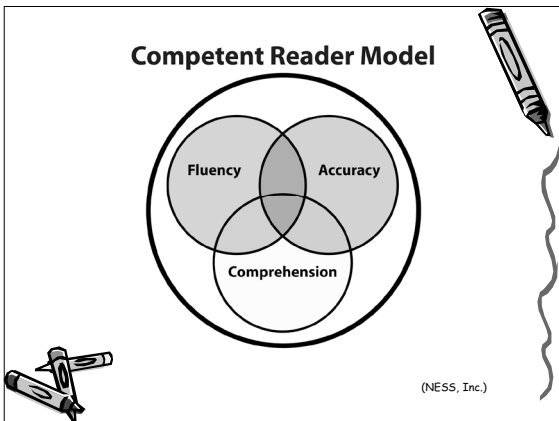
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**Competent Reader Model**



(NESS, Inc.)



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## PARTICIPANT NOTE-TAKING GUIDE

### I. Gestalt of Reading

**Involves three kind of overall skills: auditory, visual and language.**

(Kit Roberts, M.A., CCC-SLP)



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*Continued...*

- **Auditory and visual skills are related to the ability to identify and decode words.**

(Kit Roberts, M.A., CCC-SLP)



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*Continued...*

- **Language skills are related to the ability to create meaning from text.**

(Kit Roberts, M.A., CCC-SLP)



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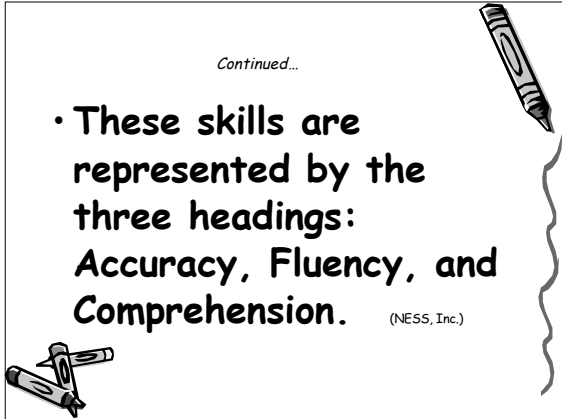
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## PARTICIPANT NOTE-TAKING GUIDE

*Continued...*

- These skills are represented by the three headings: **Accuracy, Fluency, and Comprehension.** (NESS, Inc.)



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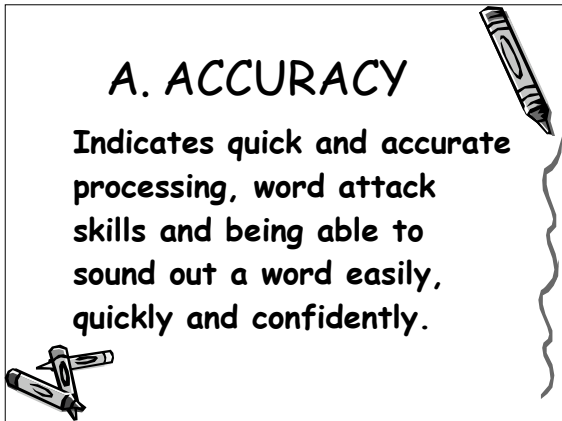
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### A. ACCURACY

Indicates quick and accurate processing, word attack skills and being able to sound out a word easily, quickly and confidently.



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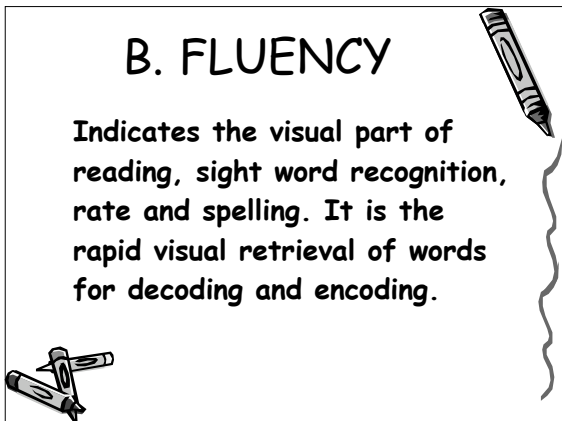
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### B. FLUENCY

Indicates the visual part of reading, sight word recognition, rate and spelling. It is the rapid visual retrieval of words for decoding and encoding.



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## PARTICIPANT NOTE-TAKING GUIDE

### C. COMPREHENSION

Relates to vocabulary, oral language skills and the use of content in reading.



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### II. Reading is an Integrated Process

A. If a student has difficulty perceiving sounds in words or perceiving letters in words, it will affect his/her comprehension.



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*Integrated Process continued...*

B. Teaching reading is an "interactive process" that "assigns greater weight to facility in word identification than to language comprehension processes at early stage of reading development and greater weight to language comprehension processes at the later stages of reading development.



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## PARTICIPANT NOTE-TAKING GUIDE

*Integrated Process Continued...*

**C. Reading is a three-step process: take in, think over, and put out. Without existing vocabulary inside the student, decoding is meaningless.**



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*Integrated Process Continued...*

**D. Teachers need to stimulate their students for all three circles, early in the reading process, in order to develop independent readers. Integrated stimulation is important because our sensory system is designed to be integrated.**



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**Stimulate the three processes by:**

- 1. Concrete to abstract.**
- 2. Slow sensory to fast sensory processing.**
- 3. Phonological to visual processing for both words and concepts.**
- 4. WE DO NOT EXCLUDE ANY CIRCLE.**



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## PARTICIPANT NOTE-TAKING GUIDE

### SCIENTIFICALLY BASED READING INSTRUCTION

***I. The most effective reading programs stimulate the sensory-cognitive processes involved in reading and not just content based.***



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### A. PROCESS-BASED INSTRUCTION ALLOWS FOR REALTIME DIAGNOSIS.

IN CONTENT BASED INSTRUCTION WE ARE LOOKING FOR THE RIGHT OR  
WRONG ANSWER.



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*Continued...*

**B. WITH PROCESS-BASED  
INSTRUCTION STUDENTS  
ARE GUIDED TO THEIR  
ERRORS.**



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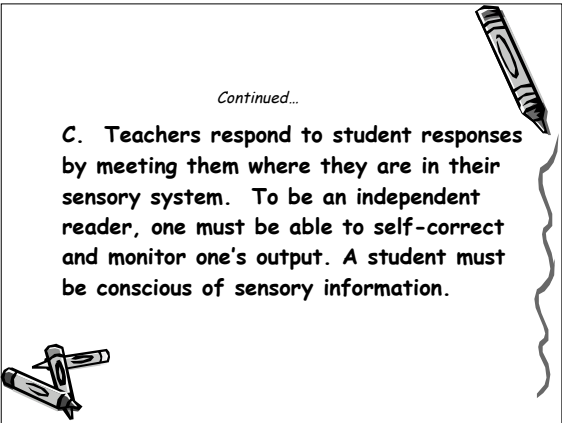
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PARTICIPANT NOTE-TAKING GUIDE

Continued...

**C. Teachers respond to student responses by meeting them where they are in their sensory system. To be an independent reader, one must be able to self-correct and monitor one's output. A student must be conscious of sensory information.**



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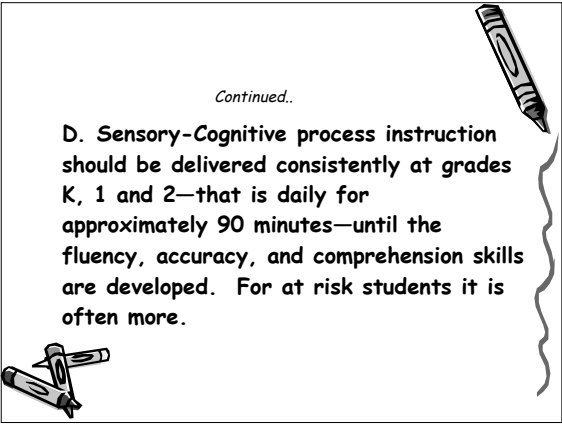
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Continued..

**D. Sensory-Cognitive process instruction should be delivered consistently at grades K, 1 and 2—that is daily for approximately 90 minutes—until the fluency, accuracy, and comprehension skills are developed. For at risk students it is often more.**



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## PARTICIPANT NOTE-TAKING GUIDE

### E. THREE SYSTEMS NEED TO AGREE IN STIMULATION

- The three systems  
are kinesthetic,  
auditory, visual.



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*Continued...*

1. Students see a word (visual), translate it into phonemic information (auditory), and say it (auditory and kinesthetic). They must be able to verify that what they saw matched what they said and heard. Alternately, they can hear a word (auditory), translate it into graphemes (visual), and say it or write it (auditory, visual, and/or kinesthetic). Students who can monitor the three sensory systems, making sure they match, are able to independently self correct.



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*Continued...*

2. A certain kind of hearing seems to be critical. Students who cannot discriminate phonemes within syllables when they hear them (auditory) need to develop their ability to monitor phonemes in a more concrete manner, such as with articulatory feedback (kinesthetic system). When their phonemic awareness is intact at the hearing level, then students are ready to discriminate phonemes at a more abstract level with graphemes (visual system).



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## PARTICIPANT NOTE-TAKING GUIDE

*Continued...*

**3. Integrating the oral-motor, auditory, and visual information inherent in phonemes and graphemes brings this sensory information to the learners' conscious awareness.**



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*Continued...*

**F. Programs that build the foundation of phonemic awareness from articulatory feedback to orthography successfully address the needs of all readers.**



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**II. Reading Taught throughout curriculum at every grade level.**

**A. Reading transcends phonics and whole language.**



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## PARTICIPANT NOTE-TAKING GUIDE

*Continued...*

**B. The most important skills are comprehension and vocabulary.**

- Decoding is necessary but not sufficient.
- Fluency is necessary but not sufficient.
- Phonemic awareness is important to stimulate early in the reading process then, then it drops off.



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**III. *Instruction Follows a Developmental Order***

**A. We do not put students on the page and try to build fluency until they can decode. Stimulating skills in the following order supports fluency:**

1. word attack
2. word recognition
3. reading accuracy
4. spelling
5. reading rate



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*Continued...*

**B. Phonemic awareness and symbol imagery are precursors to word attack, word recognition, and contextual reading.**



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## PARTICIPANT NOTE-TAKING GUIDE

*Continued...*

C. Phonemic awareness drops out, but vocabulary development (oral and written), comprehension, and contextual reading (rate and accuracy) never fall out. They need continual stimulation.



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*Continued...*

D. Early readers establish written word pattern recognition, just as early speakers establish oral word recognition. They enjoy the act of decoding for itself. Later, in grade 3, the reader switches over to linguistic recognition....



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*Continued...*

- These two processes occur in different parts of the brain. The accomplished reader needs to have laid foundations for both. (Vail, 1991).



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## PARTICIPANT NOTE-TAKING GUIDE

IV. Stimulating all the process  
provide thorough and effective  
teaching methods for our students

A. Reading programs based on  
instruction in phonemic awareness  
and phonics improved the brain  
functioning of poor readers...



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*Continued..*

Specifically, their brains showed  
increased activation in the automatic  
recognition center, which more  
closely matched the brain functioning  
of good readers. (Shaywitz & Shaywitz, 2004)



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*Continued...*

B. The structure of symbolic  
language (phoneme-grapheme  
correspondence, reading  
processes, orthography, etc.) is  
not easily intuited or inferred.  
Most children need direct,  
multi-sensory instruction. (Vail, 1991)



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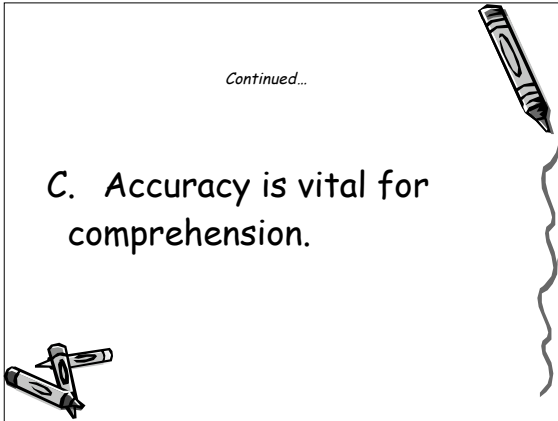
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## PARTICIPANT NOTE-TAKING GUIDE

*Continued...*

C. Accuracy is vital for comprehension.



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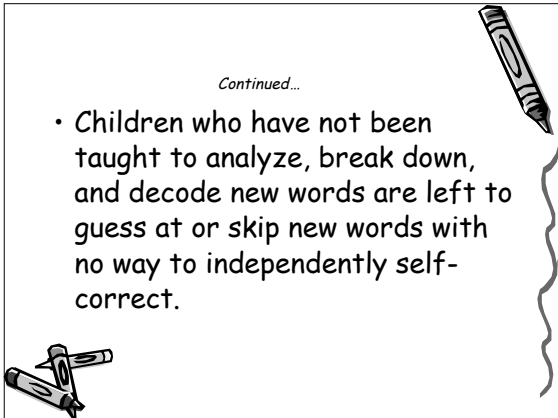
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*Continued...*

- Children who have not been taught to analyze, break down, and decode new words are left to guess at or skip new words with no way to independently self-correct.



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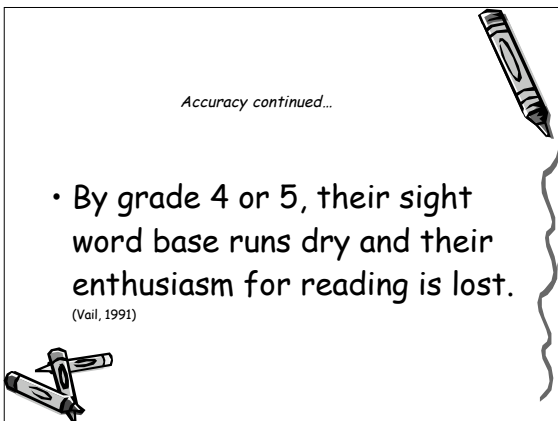
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*Accuracy continued...*

- By grade 4 or 5, their sight word base runs dry and their enthusiasm for reading is lost.  
(Vail, 1991)



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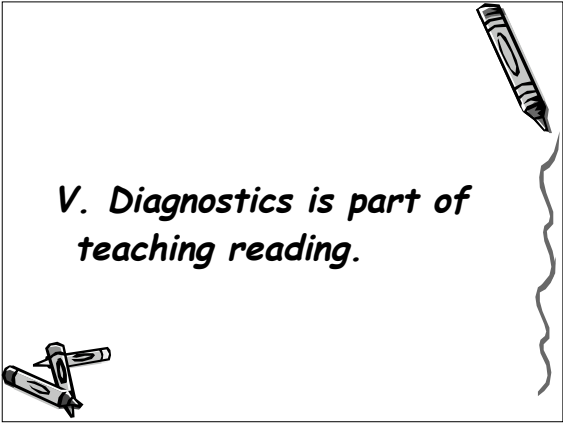
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**PARTICIPANT NOTE-TAKING GUIDE**



***V. Diagnostics is part of teaching reading.***

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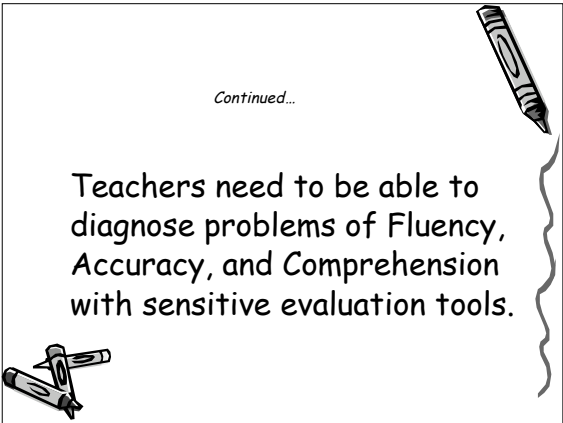
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*Continued...*

Teachers need to be able to diagnose problems of Fluency, Accuracy, and Comprehension with sensitive evaluation tools.

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**APPENDIX C: SUPPORT MATERIALS**

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## SUMMARY OF RESEARCH

by Kit Roberts, M.A., CCC-SLP

### ABSTRACT

Reading has been scientifically researched over the last one hundred years. Educators now have clear information to guide them in the classroom. By stimulating certain skills early in the reading process, most children will learn how to read and write. This syllabus addresses more in depth scientific based reading research, the Competent Reader Model, and early reading and writing processes that lay the foundation for symbolic language development (reading and writing). By putting this base of information to work in the classroom in an atmosphere of fun and respect, teachers will support Alaskan children in their ability to succeed and realize their potential greatness.

### A HOPEFUL TIME

#### I. Alaskan educators bring hope to Alaska's children.

- A. The numbers of school-aged children with poor literacy skills have reached crisis proportions in America.
  - 1. In 1998, the Center for Educational Statistics reported that 38% of children in grade 4 could not read at expected levels (Phillips, 2001).
  - 2. Up to 70% of children who live in poverty and are from low-income, urban school districts cannot read basic, simple text in the 4th grade (Lyon, 2001).
  - 3. In Alaska, one out of three students in grades 3-10 do not test as proficient in reading on statewide exams. In some villages, two out of three students do not test as proficient (Alaska Department of Education and Early Development, 2003).
  - 4. The National Institute of Child Health and Human Development (NICHD) estimates that at least 20 million school-aged children demonstrate a failure to read.
  - 5. Approximately 2.3 million children will qualify for special education services under the category of learning disabilities. This leaves a staggering number of poor readers who do not qualify: 17.7 million. Their reading needs are addressed either through some form of compensatory education or abandoned all together (Lyon, 2001).
  - 6. Children with poor literacy skills are condemned to low academic achievement and limited occupational and economic success.

#### II. Reading disabilities are the most prevalent classification of learning disability

...and account for the largest percentage of students identified as learning disabled in the public schools (Stanovich, 1988).

- A. School reforms designed to address reading issues have become widespread, costing millions of dollars (Kiefer, 2001).
- B. In the No Child Left Behind and Reading First acts, legislators and regulation writers have

inserted themselves into the world of classroom decision-making.

1. How frequently shall we test children?
2. Which children must be tested?
3. What must children need to learn in order to read?
4. When do they need to learn it?
5. How should that instruction be provided?
6. By whom?
7. For how long?
8. Using what materials?

### III. Failure to develop reading skills by grade 4 correlates with continuing illiteracy into adulthood.

With appropriate instruction and intervention, however, the 38% of American children who cannot read in grade 4 can be reduced to 6% or less (Lyon, 2001).

- A. Investigations into the cause and treatment of literacy disorders have received unprecedented funding in the recent past, generating solid evidence that clarifies successful methodologies and intervention techniques to address literacy development for both average and low-performing students.
  1. In summarizing the data, phonemic awareness skills seem to play an etiological role in reading disorders. People with poor phonemic awareness skills are unable to effectively master literacy skills. Phonemic awareness, the ability to identify and manipulate phonemes within syllables, plays a causal role in learning to read and good phonemic awareness is highly correlated with later success in reading ability. Initially, it is an oral language skill rooted in oral-motor-auditory feedback. Later, it progresses to the ability to segment phonemes within syllables. Finally, it evolves into a written language skill with the ability to convert phonemes into graphemes.
- B. Extensive research supported by the NICHD has demonstrated that the majority of children who fail to develop reading skills can become fluent readers with interventions that provide “systematic, explicit, and intensive instruction in phonemic awareness, phonics, reading fluency, vocabulary, and reading comprehension strategies” (Lyon, 2001 p. 4).
- C. To summarize, five areas of reading instruction should be emphasized in classrooms (National Reading Panel [2000] Report; Ambruster & Osborn, 2001):
  1. phonemic awareness
  2. phonics
  3. fluency
  4. vocabulary
  5. text comprehension

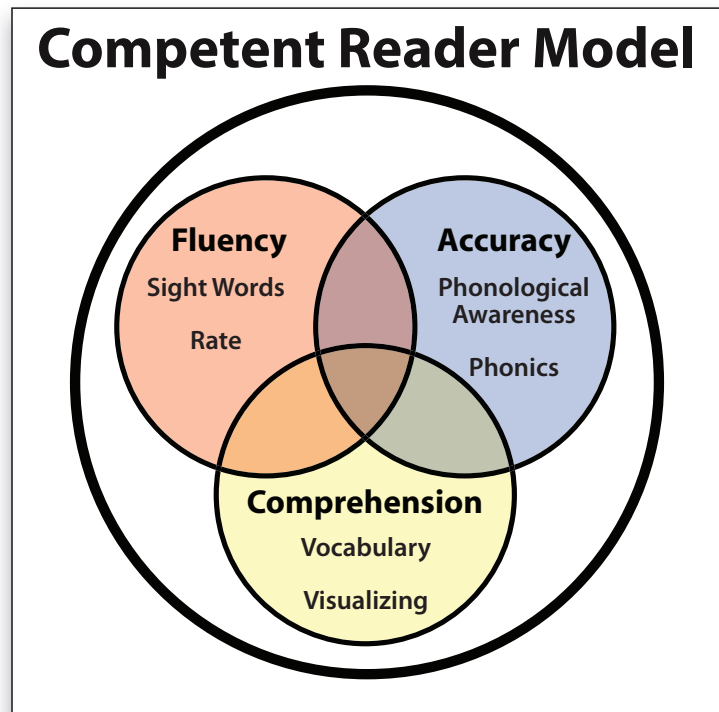
### IV. A knowledgeable teacher with a wide range of teaching strategies at his or her disposal

...can vary and adapt instruction to meet the needs of a wide variety of children in the classroom (Keene, 2003).

- A. Alaska’s teachers can and should make day to day decisions about what should be taught and how.
  - 1. They are familiar with Alaska’s rigorous state standards.
  - 2. They understand its accountability system.
  - 3. They work hard each day to understand the complex needs of the students they serve and to respond differentially to those needs.
  - 4. They understand the research on which a scientifically based reading program is built.
  - 5. They understand how to use sensitive assessments for diagnosis and progress.
  - 6. They customize the balanced reading instruction they offer based on the needs of the children they serve each year.
  - 7. They are given intensive, professional learning opportunities, designed to quickly build the research-based knowledge teachers need to be able to make good instructional decisions.
  - 8. By using “what works” instruction, reading improves for large numbers of children.
  - 9. They remain open to new research and change their instructional practice as needed in order to help all children become successful readers. (Ambruster & Osborn, 2001)



## THE COMPETENT READER MODEL



The Competent Reader Model: Circles Paradigm

### I. The gestalt of reading involves three kinds of overall skills:

...auditory, visual, and language. Auditory and visual skills are related to the ability to identify and decode words. Language skills are related to the ability to create meaning from text. They are represented by the three headings: Accuracy, Fluency, and Comprehension. Underneath every circle, the student is experiencing something in their sensory system.

- A. Accuracy indicates quick and accurate phonetic processing, word attack skills and being able to sound out a word easily, quickly, and confidently. Its sensory foundation is phonemic awareness.
- B. Fluency indicates the visual part of reading, sight word recognition, rate and spelling. Its sensory foundation is symbol imagery, which is the ability to (re)visualize words quickly and confidently, without having to write them down, sound them out, or look them up in a dictionary. Fluency is rapid visual retrieval of words for decoding and encoding.
- C. Comprehension relates to vocabulary, oral language skills and the use of context in reading. It involves being able to decode words and more importantly, generate mental representations for the concepts being presented in print. It includes the ability to build a "whole" from the "parts," retain facts, and answer critical thinking questions. Its sensory foundation is concept imagery, the ability to visualize and revisualize (recall) concepts and ideas.

## II. Reading is an integrated process.

- A. If a student has difficulty perceiving sounds in words or perceiving letters in words, it will affect his/her comprehension.
- B. Teaching reading is an “interactive process” that “assigns greater weight to facility in word identification than to language comprehension processes at early stages of reading development and greater weight to language comprehension processes at later stages of development”(Vellutino, Scanlon, & Tanzman, 1994, p. 280).
- C. “Reading is a three-step process: take in, think over, and put out. Without existing vocabulary inside the student, decoding is meaningless, in the deepest sense of the word” (Vail, 1991, p.25 & 6).
- D. Teachers need to stimulate their students for all three circles, early in the reading process, in order to develop independent readers. Integrated stimulation is important because our sensory system is designed to be integrated. We take students from concrete to abstract, slow sensory processing to fast sensory processing, and phonological processing to visual processing for both words and concepts in the same lesson. We do not exclude any circle, although we may emphasize particular circles for periods of time, depending on our students’ developmental levels and needs.

## SCIENTIFICALLY BASED READING INSTRUCTION

### I. The most effective reading programs...

...stimulate the sensory-cognitive processes involved in reading and are not just content based.

- A. Process-based instruction allows for real-time diagnosis.
  - 1. In content-based instruction, we are looking for the right or wrong answer.
- B. With process-based instruction, students are guided to their errors.
- C. We want to know what students can’t do, therefore, we never say “no” when they make a mistake and we never “correct” them. Instead we respond to their response by meeting them where they are in their sensory system. We stimulate them with Socratic questioning to help them reflect in-depth on their answer and refine their sensory-cognitive judgments. In this way, we change how their brains process information.
  - 1. In order to be an independent reader, one must be able to self-correct one’s own errors. In order to self-correct, one must be able to monitor one’s output. In order to monitor output, one must be conscious of sensory information. For reading and spelling, that information is delivered mostly via the senses of sight, hearing, and touch.
- E. Sensory-cognitive process instruction should be delivered consistently at grades K, 1, and 2--that is, daily for approximately 90 minutes--until the fluency, accuracy, and comprehension skills are developed. For at-risk students, two to three hours a day of small-group instruction are necessary to develop skills.

- F. Three sensory systems need to agree in sensory-cognitive stimulation: kinesthetic, auditory, visual.
  - 1. Students see a word (visual), translate it into phonemic information (auditory), and say it (auditory and kinesthetic). They must be able to verify that what they saw matched what they said and heard. Alternately, they can hear a word (auditory), translate it into graphemes (visual), and say it or write it (auditory, visual, and/or kinesthetic). Students who can monitor the three sensory systems, making sure they match, are able to independently self correct.
  - 2. A certain kind of hearing seems to be critical. Students who cannot discriminate phonemes within syllables when they hear them (auditory) need to develop their ability to monitor phonemes in a more concrete manner, such as with articulatory feedback (kinesthetic system). When their phonemic awareness is intact at the hearing level, then students are ready to discriminate phonemes at a more abstract level with graphemes (visual system).
    - a) Students trained in grade 1 with articulatory feedback methods made greater gains in word attack and reading achievement in grade 1 and had higher reading scores in grades 2 through 8 compared with students who did not receive the training. Kindergarten children trained in articulatory feedback entered grade 1 with higher word attack skills than controls. The improvement was equal for boys and girls (Lindamood & Lindamood, 1998).
  - 3. Integrating the oral-motor, auditory, and visual information inherent in phonemes and graphemes brings this sensory information to the learners' conscious awareness. This enables them to think about sounds more easily. The sensory system is stimulated in small increments. Eventually, kinesthetic (oral-motor for speech and eye-hand for writing), auditory, and visual processing becomes integrated and simultaneous.
- G. Programs that build the foundation of phonemic awareness from articulatory feedback to orthography successfully address the needs of all readers.
  - 1. Phonemic awareness problems show up early and persist over time in the dyslexic population (Bruck, 1992). Poor phonemic awareness segregates poor readers from good readers, even into adulthood.
  - 2. Several studies have demonstrated that stimulating phonemic awareness facilitates the development of reading; however, phonemic awareness does not develop automatically when one learns how to read. Torgesen, Wagner and Rashotte (1994) found that phonological variables such as serial naming, isolated naming, synthesis, analysis, and memory were not acquired as a direct result of learning to read. They exist in their own right as part of our human endowment.
  - 3. Phonemic awareness is fundamentally a sensory-cognitive skill that requires the ability to associate oral-motor movements with their resulting sounds. It is the ability to manipulate the segments of speech, first orally, then later with letters/graphemes. It develops initially on an oral-motor/auditory feedback level, then develops into orthographic knowledge. Phonemic awareness can be measured through a variety of tasks, such as phoneme blending, segmentation, deletion, and

multisyllable word production (Lance, Swanson, & Peterson, 1977). Orthographic knowledge is measured through lexical verification, homonym verification, spelling, and pseudo word recognition (Olsen, Wise, Johnson, & Rack, 1994).

4. The idea that eye-movement differences, balance problems, visual-perceptual problems, or reversing letters predicts dyslexia has been debunked in the literature (see Mann, 1988, for a review; Stanovich, 1986).

## II. Reading should be taught throughout the curriculum at every grade level.

### A. Reading transcends phonics and whole language.

1. How do you weight the five areas of reading instruction?
2. The most important skills are comprehension and vocabulary.
  - a) Decoding is necessary but not sufficient.
  - b) Fluency is necessary but not sufficient.
  - c) Phonemic awareness is important to stimulate early in the reading process, then it drops off as a focus.

## III. Instruction follows a developmental order.

- A. We do not put students on the page and try to build fluency until they can decode. Stimulating skills in the following order supports fluency:
  1. word attack
  2. word recognition
  3. reading accuracy
  4. spelling
  5. reading rate
- B. Phonemic awareness and symbol imagery are precursors to word attack, word recognition, and contextual reading.
- C. Phonemic awareness drops out, but vocabulary development (oral and written), comprehension, and contextual reading (rate and accuracy) never fall out. They need continual stimulation.
- D. Early readers establish written word pattern recognition, just as early speakers establish oral word recognition. They enjoy the act of decoding for itself. Later, in grade 3, the reader switches over to linguistic recognition. These two processes occur in different parts of the brain. The accomplished reader needs to have laid foundations for both (Vail, 1991).

## IV. By directly stimulating phonological processing, phonemic awareness,

...grapheme-phoneme correspondence, reading processes, phonics, symbol imagery, and orthography, we provide thorough and effective teaching methods for our students.

- A. Reading programs based on instruction in phonemic awareness and phonics improved the brain functioning of poor readers. Specifically, their brains showed increased activation

in the automatic recognition center, which more closely matched the brain functioning of good readers (Shaywitz & Shawitz, 2004).

- B. The structure of symbolic language (phoneme-grapheme correspondence, reading processes, orthography, etc.) is not easily intuited or inferred. Most children need direct, multi-sensory instruction (Vail, 1991).
- C. Accuracy is vital for comprehension. Children who have not been taught to analyze, break down, and decode new words are left to guess at or skip new words with no way to independently self-correct. By grade 4 or 5, their sight word base runs dry and their enthusiasm for reading is lost (Vail, 1991).

#### V. Diagnostics is part of teaching reading.

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- A. Teachers need to be able to diagnose problems of Fluency, Accuracy, and Comprehension with sensitive evaluation tools. While diagnostics is not covered in this presentation, some diagnostic tools are listed here.
  - 1. Some instruments to evaluate the Accuracy circle include:
    - Lindamood Auditory Conceptualization Test (LAC), [www.ganderpublishing.com](http://www.ganderpublishing.com) or 1/800/554-1819
    - Comprehensive Test of Phonological Processing (CTOPP). [www.proedinc.com](http://www.proedinc.com) or 1/800/897-3202
    - DIBELS: Dynamic Indicators of Early Literacy Skills. [Dibels.uoregon.edu](http://Dibels.uoregon.edu)
    - Get Ready to Read! Screening Tool. [www.getreadytoread.org](http://www.getreadytoread.org)
    - TERA-3: Test of Early Reading Ability. [www.agsnet.com](http://www.agsnet.com) or 1/888/328-2650
    - Woodcock-Johnson III (WJ III), Word Attack Subtest. [www.riverpub.com](http://www.riverpub.com) or 1/800/323-9540
  - 2. Some instruments to evaluate the Fluency circle include:
    - Slosson Oral Reading Test-R3 (SORT), [www.slosson.com](http://www.slosson.com) or 1/888/756-7766
    - Wide Range Achievement Test-Revised (WRAT), Word Reading Subtest and Spelling Subtest. [wr@widerange.com](mailto:wr@widerange.com) or 1/ 800-221-9728
    - DIBELS: see above
    - Woodcock-Johnson III (WJ III). [www.riverpub.com](http://www.riverpub.com) or 1/800/323-9540
    - Gray Oral Reading Test, Fourth Edition, (GORT-4). [www.proedinc.com](http://www.proedinc.com) or 1/800/897-3202
    - Test of Written Spelling (TWS-4). [www.proedinc.com](http://www.proedinc.com) or 1/800/897-3202
    - Test of Legible Handwriting (TOLH). [www.proedinc.com](http://www.proedinc.com) or 1/800/897-3202

## REFERENCES

- Alaska Department of Education and Early Development (2003). *Reading report card*. Retrieved from <http://www.eed.state.ak.us/stats/>, 6/5/ 2004.
- Ambruster, B. & Osborn, J. (2001). *Put reading first: The research building blocks for teaching children to read*. Jessup, M.D.: Partnership for Reading, [www.nifl.gov](http://www.nifl.gov).
- Bain, A. M., Baillet, L.L, & Moats, L.C. (1991). *Written language disorders theory into practice*. Austin, TX: Pro-Ed.
- Barker, T. A., Torgesen, J. A. & Wagner, R. K. (1992). *The role of orthographic processing skills on five different reading tasks*. Reading Research Quarterly, 27, 334-45.
- Bell, Nanci (1997). *Seeing Stars: Symbol Imagery for Phonemic Awareness, Sight words and Spelling*. San Luis Obispo, C.A.: Gander Publishing
- Bernthal J. E., & N. W. Bankson (Eds.). (1994). *Child Phonology: Characteristics, Assessment, and Intervention with Special Populations*. New York: Thieme.
- Blachman, B. A., Tangel, D. M., Ball, E. W., Black, R. & McGraw, C. K. (1999). *Developing phonological awareness and word recognition skills: A two-year intervention with low-income, inner-city children*. Reading and Writing: An Interdisciplinary Journal, 11, 239-273.
- Bradley, L., & Bryant, P.E. (1985). *Rhyme and reason in reading and spelling*. IARLD Monographs No. 1. Ann Arbor: University of Michigan Press.
- Bruck, M. (1992). *Persistence of dyslexics' phonological awareness deficits*. Developmental Psychology, 28, 874-886.
- Calfee, R.C., & Piontkowski, D.C. (1981). *The reading diary: acquisition of decoding*. Reading Research Quarterly, 3, 346-372.
- Calvert, Sandra L. (1991). *Impact of singing on students' verbatim recall and learning*.
- Coles, R.W., & Goodman, Y. (1980). *Do we really need those oversized pencils to write with? Theory into Practice*, 19, 194-196.
- Cossu, G. (1997). *Domain-specificity and fractionability of neuropsychological processes in Literacy Acquisition*. In Pontecorvo, C. (Ed.) *Writing development: An interdisciplinary view*, 243-258. Philadelphia, PA: John Benjamin's Publishing
- Duncan, L. G., & Johnston, R. S. (1999). *How does phonological awareness relate to nonword reading skill amongst poor readers?* Reading and Writing: In Interdisciplinary Journal, 11, 405-439.
- Ehri, L. C. (1992). *Reconceptualizing the development of sight word reading and its relationship to recoding*. In Gough, P.B., Ehri, L.C. & Treiman, R. (Eds.) *Reading Acquisition*, 107-143. Hillsdale, NJ.: Erlbaum, Associates.
- Felton, R. H. (1993). *Effects of Instruction on the Decoding Skills of Children with Phonological-Processing Problems*. Journal of Learning Disabilities, 26, 583-589.



- Foorman, B.R., & Liberman, D. (1989). *Visual and phonological processing of words: A comparison of good and poor readers*. *Journal of Learning Disabilities*, 22, 349-355.
- Fry, E. (1994). *1000 Instant Words: The Most Common Words for Teaching Reading, Writing and Spelling*. Laguna Beach, C.A.: Laguna Beach

## EDUCATIONAL BOOKS

- Gillam, R.B., & van Kleeck, A., (1996). *Phonological awareness training and short-term working memory: Clinical implications*. *Topics in Language Disorders*, November, 72-81
- Heilman, K. M., Voeller, K. & Alexander, A. W. (1996). *Developmental dyslexia: A motor-articulatory feedback hypothesis*. *Annals of Neurology*, 39, 407-12.
- Henderson, L., & Chard, J. (1980). *The reader's implicit knowledge of orthographic structure*. In U. Frith (Ed.), *Cognitive processes in spelling*. London: Academic Press.
- Howard, M. (1986). *Effects of Pre-reading Training In Auditory Conceptualization on Subsequent Reading Achievement*, Unpublished doctoral dissertation, Brigham Young University, Provo, UT.
- Jerger, M.A., (1996). *Phoneme awareness and the role of the educator*. *Intervention in School and Clinic*, 32, 5-13,
- Johnston, R. S., Anderson, M., & Holligan, C. (1996). *Knowledge of the alphabet and explicit awareness of phonemes in pre-readers: The nature of the relationship*. *Reading and Writing: An Interdisciplinary Journal*, 8, 217-234.
- Keene, E. (2003, May 1). *Investing in Expertise: In Whom Shall Knowledge About Teaching and Learning Lie?* Head First Colorado. Retrieved May 19, 2003 from <http://www.headfirstcolorado.org>
- Kiefer, F. (2001, June 30). *White House plan to teach children to read*. *Christian Science Monitor*. Retrieved June 30, 2001, from <http://www.educationnews.org>
- Lance, D. M., Swanson, L. A., & Peterson, H. A. (1997). *A validity study of an implicit phonological awareness paradigm*. *Journal of Speech-Language, and Hearing Research*, 40, 1002-1010.
- Lander, K., Frith, U., Wimmer, H. (1996). *Intrusion of orthographic knowledge on phoneme awareness: Strong in normal readers, weak in dyslexic readers*. *Applied Psycholinguistics*, 17, 1-14.
- Liberman I. Y., Shankweiler, D., Fischer, W. F., & Carter, B. (1974). *Explicit syllable and phoneme segmentation in the young child*. *Journal of Experimental Child Psychology*, 18, 201-212.
- Liberman, I. Y. & Shankweiler, D. (1985). *Phonology and the problems of learning to read and write*. *Remedial and Special Education*, 6, 8-17.
- Lindamood, C.H. & Lindamood, P.C. (1975). *Auditory discrimination in depth* Austin, TX: PRO-ED.
- Lindamood, C.H., & Lindamood, P.C. (1979). *Lindamood Auditory Conceptualization Test*. Austin, TX: DLM Teaching Resources.
- Lindamood, P. C., Bell, N., & Lindamood, P. (1992). *Issues in phonological awareness assessment*. *Annals of Dyslexia*, 42, 242-259.

- Lindamood, P., Bell, N., & Lindamood, P. (1997). *Sensory-cognitive factors in the controversy over reading instruction*. The Journal of Developmental and Learning Disorders, 1, 143-182.
- Lindamood, P., & Lindamood, P. (1998). *Lindamood phoneme sequencing program for reading, spelling, and speech*, 3rd edition, Austin, TX: PRO-ED.
- Lindamood-Bell Learning Processes (2000). *The role of symbol imagery in phonological and orthographic processing*. Research presented at the Lindamood-Bell™ 9th Annual International Conference, March 2001.
- Lyon, R.G., (2001, March). *Measuring success: Using assessments and accountability to raise student achievement*. Paper presented to the Subcommittee on Education Reform Committee on Education and the Workforce, U.S. House of Representatives, Washington, D.C.
- Mykelbust, H. R. (1973). *Development and disorders of written language* volume 2.. New York: Grune & Stratton.
- National Reading Panel (2002) Report. *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implication for reading instruction – reports of the subgroups*. National Reading Panel, retrieved 6/5/04 from [www.nationalreadingpanel.org](http://www.nationalreadingpanel.org).
- Olsen, R., Wise, B., Johnson, M. & Rack, J. (1994). *Measurement of word recognition, orthographic and phonological skills*. In G.R. Lyon (Ed.). *Frames of reference for the assessment of learning disabilities*, 243-77. Baltimore, MD: Brookes Publishing.
- Phillips, G. (2001, April 24). *No change in average NCE Statistics fourth-grade reading scores*. National Center for Educational Statistics. Article posted to <http://educationnews.org>
- Pratt, A. C., Brady, S. (1988). *Relationship of phonological awareness to reading disability in children and adults*. Journal of Educational Psychology, 80, 319-323.
- Rack, J. P., Snowling, M. J., & Olson, R. K. (1992). *The nonword reading deficit in developmental dyslexia: A Review*. Reading Research Quarterly, 27, 29-53.
- Scanlon, D. M. & Vellutino, F. R. (1997). *A comparison of the instructional backgrounds and cognitive profiles of poor, average, and good readers who were initially identified as at risk for reading failure*. Scientific Studies of Reading, 1, 191-215.
- Shaywitz, B. & Shaywitz, S. (2004). *Development of left occipitotemporal systems for skilled reading in children after a phonologically-based intervention*. Biological Psychiatry, 55, 926-933.
- Singson, M, Mahoney, D. & Mann, V. (2000). *The relation between reading ability and morphological skills: Evidence from derivational suffixes*. Reading and Writing: An Interdisciplinary Journal, 12, 219-252.
- Spalding, R.B., & Spalding, W.T. (1962). *The Writing Road to Reading*, New York: William Morrow & Co. 1962, p. 74.
- Stanovich, K. E. (1986). *Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy*. Reading Research Quarterly, 21, 360-406.
- Stanovich, K. E. (1988). *Explaining the differences between the dyslexic and the garden-variety poor reader: The phonological-core variable-difference model*. Journal of Learning Disabilities, 21, 590-612.



- Stuart, M. (1999). *Getting ready for reading: Early phoneme awareness and phonics teaching improves reading and spelling in inner-city second language learners*. British Journal of Psychology, 69, 587-605.
- Swank, L. K. (1995). *Phonology, metaphonolgy, and reading: Why the confusion?* The Clinical Connection, 9, 4-8.
- Torgesen, J. K., Wagner, R. K., & Rahothe, C. A. (1994). *Longitudinal studies of phonological processing and reading*. Journal of Learning Disabilities, 27, 276-286.
- Truch, S. (1994). *Stimulating basic reading processes using auditory discrimination In depth*. Annals of Dyslexia, 44, 60-80.
- Vail, Priscilla (1991). *Common Ground Whole Language and Phonics Working Together*. Rosemont, N.J.: Modern Learning Press.
- Vellutino, F. R., Scanlon, D. M., & Tanzman, M.S. (1994). *Components of reading ability: Issues and problems in operationalizing word identifications, phonological coding, and orthographic coding*. In G.R. Lyon (Ed.), *Frames of reference for the assessment of learning disabilities* (pp. 279-332). Baltimore, M.D.: Brookes.
- Wagner, R. K. & Torgesen, J. K. (1987). *The nature of phonological processing and its causal role in the acquisition of reading skills*. Psychological Bulletin, 101, 192-212.
- Wagner, R. K. (1988). *Causal relations between the development of phonological processing abilities and the acquisition of Reading Skills: A Meta-Analysis*. Merrill-Palmer Quarterly, 34, 261-279.
- Worthington, P. (2003, Feb. 17). *Scientifically based reading research*. Presentation remarks made at the Alaska Statewide Special Education Conference, Anchorage, AK.
- Yavas, M. S., Gogate, L. J. (1999). *Phoneme awareness in children: A function of sonority*. Journal of Psycholinguistic Research, 28, 245-261.

# ALASKA READING

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## Volume II: Alphabet Foundation Part 1: Phonemic Awareness by Links Learning

### PARTICIPANT GUIDE

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#### OBJECTIVES

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By the end of this session, participants will be able to:

- Understand the importance of oral awareness in identifying phonemic awareness. (Structure of Language)
- Define phonemic awareness and its importance and purpose in a balanced reading program. (Structure of Language)
- Define the difference between phonological awareness, phonemic awareness and phonics. (Linkage to other Reader acquisitions.)
- Define the different types of phonemic awareness and which has the greatest transfer to reading (Learner Process)
- Identify research-based strategies for developing phonemic awareness in the classroom. (Teaching Methods)
- Identify assessments that can be used to assess a student's phonemic awareness (Assessment)
- Understand ways to motivate phonemic awareness in young students. (Motivation)
- How to create an action plan to apply the key components from this session to their classroom practice. (Teaching Methods)

#### SUMMARY

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Over the past two decades, but particularly the last 10 years, there has been a burgeoning consensus about the critical importance of phonemic awareness to beginning reading success, and about its role in specific reading disability. Various terms have been used to define phonemic awareness, but the most common definition of phonemic awareness will be discussed. Presentation included the various stages of phonemic awareness as defined by Ehri et al., 2001. Students will learn that phonemic awareness concerns the structure of words rather than their meaning. Oral awareness will be discussed and its bridge to phonemic awareness. *(The second part of Alphabetic Foundation will include phonics and early spelling, with this session concentrating on phonemic awareness).*

## What Do I Already Know About Phonemic Awareness?

### Activity 2 THINK - INK - PAIR - SHARE

**THINK - INK:** Rate your general familiarity with phonemic awareness by placing an X on the continuum and completing the Knowledge Rating Chart.

1 2 3 4 5

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Unfamiliar Very familiar

### Terminology Knowledge Rating Chart

Phonemic Awareness Term	How familiar are you with the term? Rate on a scale of 1-5 1 - No knowledge, 5 - Very knowledgeable	Can you give an example?
1. grapheme		
2. onset and rime		
3. phoneme		
4. phonemic awareness		
5. phoneme blending		
6. phoneme categorization		
7. phoneme isolation		
8. phoneme segmenting		

# Practicing with Phonemes



A **phoneme** is the smallest meaningful unit of sound in spoken language. A unit of sound is represented in print using slash marks (e.g., the phoneme or sound that the letter “a” represents is written /a/).

Word	Phonemes		Notes
	(Write each phoneme)	# of phonemes	
hen			
blend			
speech			
grouse			
knight			

**“Correlational studies have identified phonemic awareness and letter knowledge as the two best school-entry predictors of how well children will learn to read during their first two years of school.”**

(NRP, 2000, p. 2-1)

# What Is Phonemic Awareness?

Phonemic awareness is an understanding about and attention to spoken language  . It refers to the ability to **recognize** and **manipulate** speech sounds  .

For example, children who are phonemically aware can:



- **Segment** the word *hat* into its 3 sounds: /h/ /a/ /t/<sup>1</sup>
- **Blend** the 3 sounds /d/ /o/ /g/ into the word *dog*
- **Delete** the last sound of *cart* to make the word *car*

(NRP, 2000; Armbruster, Lehr, & Osborn, 2001)

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<sup>1</sup> When you see letters between / / it means the sound, not the name, of the letter.

# What Is Phonics?

Phonics is knowing the **relationships** between **printed letters**  and **spoken sounds**  .

For example, children who have phonics skills can:

- tell you which letter makes the first sound in **bat**
- tell you which letter makes the last sound in **car**

(adapted from IRA's Position Statement on PA, 1998)

## How Are Phonemic Awareness and Phonics Different?

NOTES

# Key Learning Goals



## The Participants will:

- Understand the role phonemic awareness plays in reading development.
- Learn the differences and relationships among phonological awareness, phonemic awareness and phonics.
- Learn to teach research-based strategies for developing phonemic awareness.
- Learn which phonemic awareness skills have the greatest transfer to reading.
- Create an action plan to apply key learnings from this module to their classroom practice.



# Building Blocks for Teaching Children to Read

**Comprehension  
of Written Text**

**Fluency  
Practice**

**Reading &  
Writing  
Connections**

**Vocabulary  
Development**

**Oral Language  
Development**

**Phonemic  
Awareness**

**Phonics  
Instruction**

**Critical  
Components  
of Reading**

**Alphabetics**

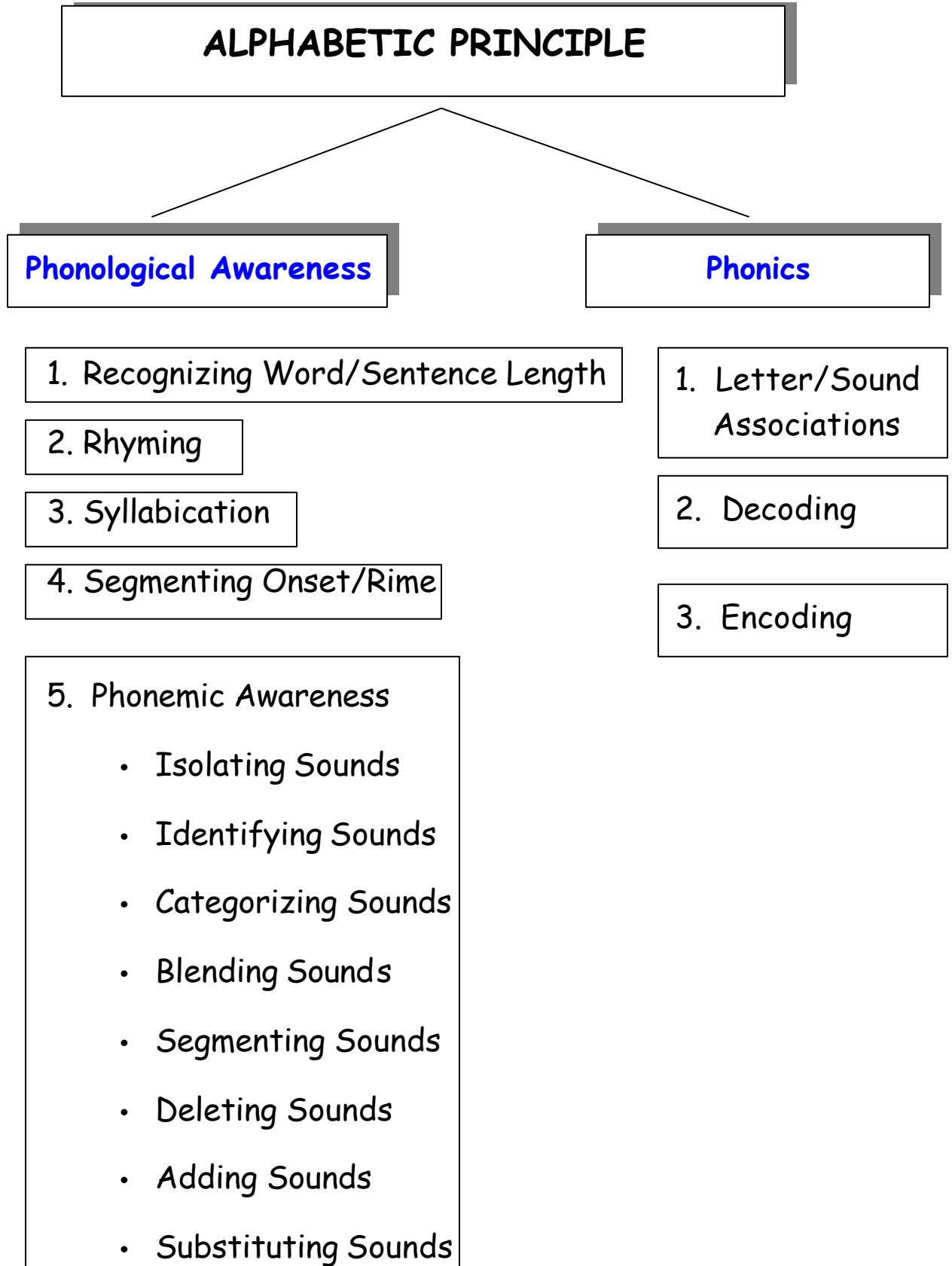
- Phonological Awareness
  - Words
  - Syllables
  - Rhymes
  - Onsets and Rimes
  - Phonemic Awareness
    - ♦ Sound Isolation
    - ♦ Sound Identification
    - ♦ Categorization
    - ♦ Blending
    - ♦ Segmentation
    - ♦ Deletion
    - ♦ Addition
    - ♦ Substitution
- Phonics
  - Letter Sound Correspondence
  - Decoding
  - Encoding

**Fluency**

- Rate
- Accuracy
- Expression

**Comprehension**

- Vocabulary
- Strategies for Reading
- Text Comprehension



## What Makes the English Language an Alphabetic System?

It uses

- written characters or symbols (**graphemes**)
- to represent sounds (**phonemes**) and sound patterns.

However, written English is not just a phonetic system. It is also

- an (**orthographic**) or spelling system
- that often reflects (**meaning**) rather than sound.
- It is based, in large measure, on the assumption that each speech sound or phoneme should have its own graphic representation.



## How Does Phonemic Awareness Instruction Help Children Learn to Read and Spell?

- Phonemic awareness is a **necessary prerequisite** to children's ability to use the alphabetic principle in learning to read, write, and spell.
- Before children learn to read print, they need to become **aware of how the sounds of speech in words work**, so they can **make a connection** between units of **sound and symbols** (letters).
- Phonemic awareness is the **foundation for later "sounding out"** (in phonics).
- Phonemic Awareness training **transfers** to and **improves** children's **reading** and **spelling**. The **effect** on reading **continues** beyond instruction.

(IRA's Position Statement on PA, 1998; NRP, 2000; Armbruster, Lehr & Osborn, 2001)

## What Are the National Reading Panel's Findings about Phonemic Awareness Instruction?

### Phonemic Awareness instruction is most effective when:

- children are taught to manipulate phonemes with letters,
- instruction is focused on one or two Phonemic Awareness skills rather than a multi-skilled approach; specifically, segmenting and blending phonemes,
- children are taught in small groups,
- instruction is based on student needs assessments (such as segmenting syllables, identifying first sounds, segmenting words into phonemes, or deleting a phoneme to make a new word),
- single sessions last no more than 30 minutes,
- instruction makes explicit how children are to apply Phonemic Awareness skills in reading,
- sounds, letters, and letter names are over-learned so children can work with them automatically to read and spell words.

## What Other Phonemic Awareness Findings Were Highlighted in the National Reading Panel Report?

- Phonemic Awareness does not constitute a complete reading program; however, it is a key component and critical foundational piece of the complex literacy process.
- Phonemic Awareness instruction helps all types of children improve their reading (preschoolers, kindergartners, normally developing readers, older struggling readers, etc.) and helps kindergartners and first graders improve their spelling.
- Phonemic awareness instruction boosts word reading and comprehension.
- Teachers need to be aware that English Language Learners (ELLs) categorize phonemes in their first language.

## Phonemic Awareness Tasks

Term	Definition	Example
Phoneme Isolation	Recognizing individual sounds in a word	Teacher: What is the first sound in <b>van</b> ? Children: /v/
Phoneme Identification	Recognizing the same phonemes in different words	Teacher: What sound is the same in <b>fix</b> , <b>fall</b> , and <b>fun</b> ? Children: The first sound, /f/
Phoneme Categorization	Recognizing the word in a set of three or four words that has the "odd" sound	Teacher: Which word does not belong: <b>bus</b> , <b>bun</b> , <b>rug</b> ? Children: <b>Rug</b> does not belong. It doesn't begin with /b/.
Phoneme Blending	Listening to a sequence of separately spoken phonemes and then combining the phonemes to form a word	Teacher: What is the word /b/ /i/ /g/? Children: /b/ /i/ /g/ is <b>big</b> . Teacher: Now let's write the sounds in <b>big</b> : /b/ write <b>b</b> ; /i/ write <b>i</b> ; /g/ write <b>g</b> .
Phoneme Segmentation	Breaking a word into its separate sounds and saying each sound as it is tapped out, or signaled	Teacher: How many sounds are in <b>grab</b> ? Children: /g/ /r/ /a/ /b/ Four sounds
Phoneme Deletion	Recognizing the word that remains when a phoneme is removed from another word	Teacher: What is <b>smile</b> without the /s/? Children: <b>Smile</b> without the /s/ is <b>mile</b> .
Phoneme Addition	Making a new word by adding a phoneme to an existing word	Teacher: What word do you have if you add /s/ to the beginning of <b>park</b> ? Children: <b>Spark</b> .
Phoneme Substitution	Substituting one phoneme for another to make a new word	Teacher: The word is <b>bug</b> . Change /g/ to /n/. Children: <b>Bun</b> .

(Armbruster, Lehr & Osborn 2001)



# What Are the Challenges for the Teacher?



The challenges are to:

- Explicitly teach the connection between Phonemic Awareness and reading
- Understand Phonemic Awareness tasks to make informed decisions when using ongoing assessments

Know when to:

- Provide more Phonemic Awareness instruction
- Change the complexity of the task
- Move on to other reading strategies
- Highlight instruction of blending and segmentation for greatest transfer to reading
- Design engaging lessons that require active participation

# Checking for Understanding Partner Review

## What Have You Learned So Far?



1. Review your notes.
2. Partner 1 reviews new learnings for 90 seconds.
3. Partner 2 reviews new learnings for 45 seconds.
4. Partner 1 reviews again for 30 seconds.
5. Partner 2 finishes by reviewing for 15 seconds.
6. Write any remaining questions.

**Remember:** Do not repeat what your partner has already shared!

## SECTION 4: ENGAGEMENT AND PRACTICE

**Subsection 1:** Classroom Strategies and Applications

**Subsection 2:** Jigsaw Teaching

**Subsection 3:** Assessment

**Subsection 4:** CD/Video Modeling

**Subsection 5:** Action Planning

## Subsection 1

# Classroom Strategies and Applications

## How Can We Focus on Phonological/Phonemic Awareness?

- Use language play, a variety of texts, and/or physical activities to introduce children to the similarities and differences in sounds of words to show that language has meaning, message, and form. Use:
  - nursery rhymes
  - alliteration
  - poetry
  - tongue twisters
  - patterned books
  - singing
  - dancing
  - fingerplay
  - alphabet/word games
- Use listening/whispering games to develop children's ability to attend selectively to sounds.
- Use clapping, tapping, marching, naming, and/or counting games to help children learn that words can be divided into syllables and that words can also be divided into sounds (phonemes).



## Activities for Developing Phonological/Phonemic Awareness

### Rhyming

Poems, Songs and Books

### Segmenting and Syllabication

Syllables and Names

Teacher, May We?

### Phoneme Isolation

Guess What? Or Guess Who?

Scavenger Hunt

### Phoneme Identification

Scavenger Hunt

Different Words

### Phoneme Categorization

Picture Sort

### Phoneme Blending

Blending

Blending with Blocks

### Phoneme Segmentation

Puppet Play

The Splits (with Blocks)

### Phoneme Deletion

What's My Word?

Good-Bye Block

### Phoneme Addition

What's My Word?

Hello, Block

### Phoneme Substitution

Silly Sound Switch

Trading Places

# Rhyming

## Poems, Songs, and Books

**Object:** In order for children to produce rhyme, they must first be able to hear it and recognize it. Use rhythm and meter to emphasize rhyme in poems, songs, chants, and books.

### To Teach:

1. Select a text (e.g., poem, song lyrics, chants) that includes rhyming and action.
2. Read the text while modeling the actions.
3. Emphasize the text's rhythm and rhyme through voice inflections.
4. Reread the text one line at a time. Have your students repeat the line in unison and do the action.
5. Repeat the text and actions from beginning to end with your students.
6. Lead a discussion about which words rhyme.
7. Have your students apply their knowledge of rhyming. See the next page for suggestions.

## Poems, Songs, and Books (continued)

### SUGGESTED TECHNIQUES:

1. Whisper a line of the poem and say the rhyming word in a normal tone.
2. Say a line of the poem and have your students clap the rhyming word.
3. Say a line of the poem sitting down and then stand when you say the rhyming word.
4. When the children are familiar with the poem, stop after the rhyming words. Ask them, "What words do you hear that rhyme?"
5. Stop before the second rhyming word and ask the children to tell the word before you read it.
6. Ask your students to suggest additional words that rhyme with the first word in the rhyming pair.



## Segmenting and Syllabication

### Application 1: Syllables and Names (Usually done early in kindergarten year)

**Object:** Students learn to separate their names into syllables as a way of engaging them in hearing the parts of words.

**Materials:** Book, pocket chart, wooden blocks, colored squares cut from paper

#### To Teach:

1. Select a book that has a character with a multisyllabic name such as *Chrysanthemum* by Kevin Henkes (1991).
2. After reading it, have your students say the character's name slowly. Then have them say it again and clap each syllable. Count the syllables as they repeat the name.
3. Say your own name and clap each syllable.
4. Have your students clap the syllables in their own names. Have the group say each child's name and then clap as they separate the syllables. (Erica will receive 3 claps, Richard 2, etc.)
5. Have your students represent the syllables in their names with wooden blocks. Place blocks on a table as you say each syllable in your name. Then call on individual students to do the same thing.
6. Cut colored squares of paper. Students choose the same number of colored squares as they have syllables in their names.

## Application 1: Syllables and Names (continued)

7. Have the children move around the room to form groups with others whose names have the same number of syllables. The group can say each name and count the syllables.

(adapted from Yopp & Yopp, *Supporting Phonemic Awareness Development in the Classroom*, 2000)

## Segmenting and Syllabication

### Application 2: Teacher, May We?

**Object:** To reinforce the children's ability to analyze and break words into syllables by responding to your directions.

#### To Teach:

1. As in the game Mother, May I? Have your students' line up some distance away from you.
2. Give directions that require children to count the number of syllables in a word. For example, "You may jump the number of times as there are syllables in the word bunny."
3. Students respond, "Teacher, may we?"
4. After your affirmative response, the children say, "Bun - ny," and move two jumps forward.
5. Provide words with different numbers of syllables. (e.g., yes, another, call, children, anyone, armadillo, motorcycle); and, vary the types of movement the students may make (e.g., take small steps, then giant steps, skip, slide).

(adapted from Yopp & Yopp, *Supporting Phonemic Awareness Development in the Classroom*, 2000)

## Phoneme Isolation

Phoneme isolation	Recognizing individual sounds in a word.	Teacher: What is the first sound in <b>van</b> ? Children: /v/
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### Application 1: Guess What? or Guess Who?

**Object:** In this game, the students will be able to isolate the initial or final sound in a word. This is an introductory phonemic awareness task that helps teach children to recognize that phonemes are the spoken sounds in words.

#### To Teach:

1. With all of the children in a circle choose the name of one of the students and distinctly enunciate its initial phoneme only. For names beginning with a stop consonant such as David, the phoneme should be repeated over and over, clearly and distinctly: "/d/ /d/ /d/ /d/ /d/." Continuant consonants should be stretched as well as repeated "/s-s-s-s/ /s-s-s-s/ /s-s-s-s/ /s-s-s-s/."
2. If more than one child's name has the same initial sound, encourage the children to identify all of the possibilities. This introduces the point that every phoneme shows up in lots of different words.

## Application 1: Guess What? or Guess Who? (cont.)

### Variation:

- Play the *Guess Who* game, enunciating the final sound of a name.
- Have a student take over the game and be the leader.
- Play this same game with items in a bag, box, or suitcase to which the teacher give clues after saying the initial sound until students have guessed the name of the item.

(adapted from Adams et. al., *Phonemic Awareness in Young Children*, 1998)

## Phoneme Isolation and Identification

### Application 2: Scavenger Hunt

**Object:** The object of this game is to have students compare the initial sound of a word from a picture with another object of the same sound found in the classroom.

#### To Teach:

1. Choose a picture and put it in a container or plastic bag. Have enough pictures to distribute to your students, who are in groups of 2 or 3. For example, in a classroom of 24 students, choose 8 or 12 pictures.
2. Take each picture out and discuss what the picture is. Take care to enunciate clearly and emphasize the target phoneme. If you are targeting initial sounds and the picture is a drum, ask your students, "What is the first sound in drum?" or "What sound do you hear at the beginning of drum?"
3. If this is a review lesson, each picture may be targeting a different sound. If this is an initial lesson, the target sound should be the same in each picture.
4. Organize your students into teams of two or three. Give them each a bag with a picture you discussed in it.
5. Explain that the team's task is to find other things in the classroom with the same target sound (phonemic identification).
6. Children walk around the room, collecting objects with the same target sound and putting them in the container or bag.
7. Bring the class back together and have each team share their objects.

**Variation:** Put the letter of your target sound in the bag with, or instead of, the picture. Introducing the letter adds a phonics component.

(adapted from Yopp & Yopp, *Supporting Phonemic Awareness Development in the Classroom*, 2000)

## Phoneme Identification

Phoneme identification	Recognizing the same sounds in different words.	Teacher: What sound is the same in <b>fix</b> , <b>fall</b> , and <b>fun</b> ? Children: The first sound, /f/, is the same.
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### Different Words

**Object:** The object of this game is to have students compare and recognize the same sound in different words.

#### To Teach:

1. Gather your students in a circle.
2. Choose a set of pictures that share the same phoneme in the initial, final, or medial position.
3. Have the children identify the name of each object depicted.
4. Say the name of each picture slowly and as many times as necessary, emphasizing the target phoneme.
5. Have one child choose a picture and name it. Repeat that step with another child.
6. Ask, "Do these two words end in the same sound?"
7. Ask, "Which sound?"
8. Say, "Yes, both words end in the same sound //."

#### Option for Phoneme Categorization (Oddity) Activity:

Complete the steps listed above and continue below.

1. Have another child choose the last (odd) picture and name it.
2. Repeat the questions. "Does this word end in the same sound?"
3. "No, this word ends with the sound / /."

(adapted from Adams et. al., *Phonemic Awareness in Young Children*, 1998)

## Phoneme Categorization (Oddity)

Phoneme categorization	Recognizing the word in a set of three or four words that has the “odd” sound.	Teacher: Which word does not belong <b>bus</b> , <b>bun</b> , <b>rug</b> ? Children: <b>Rug</b> does not belong. It doesn't begin with /b/.
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### Picture Sort

#### To Teach:

1. Gather your students in a circle.
2. Choose a set of pictures that share the same sound (either initial, final, or medial). Add one picture that does not have the same target sound as the others.
3. Name each picture and have the students repeat the words.
4. Ask, “Which one of these words has a different sound than the others?”
5. Have students repeat the words after answering.
6. Have the students sort the pictures in two piles: same sound and different sound.

(adapted from Bear et. al., *Words Their Way*, 1999)



## Phoneme Blending

Phoneme blending	Listening to a sequence of separately spoken phonemes and combining the phonemes to form a word.	Teacher: What word is /b/ /i/ /g/? Children: /b/ /i/ /g/ is big.
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### Application 1: Blending

**Object:** The object of this game is to have students see, feel, and hear the sounds in a word, recognize the order of the sounds, and blend the sounds together to make a word.

#### To Teach:

1. Start by telling your students, "Today we are going to see, feel, and hear the sounds in a word."
2. The teacher models first. Choose either your arm, leg, or hand as your "word blender."
3. When initially demonstrating this to students, start with two phoneme words (e.g., **at**, **it**, **to**). The teacher holds her left arm at shoulder height as the "word blender." She begins by touching her shoulder while saying the initial sound /a/. She continues drawing her hand slowly across her arm until she reaches her wrist and says the ending sound /t/. This is repeated at a quicker pace until the word is said, "**at**." While demonstrating the blending to your students, be sure you are moving your hand from their left to their right (as you are facing your students, *your* "left" is the end of the word).
4. Students follow the teacher and slide their hands along their own "word blenders" from the shoulder to the wrist.
5. Correct for left to right movement as they blend.
6. Repeat as needed, working up to three and four phoneme words. Be sure you divide your word into as many parts as there are phonemes in your word.

**Variations:** Different surfaces can be used as a "word blender." Some examples are sandpaper, a desktop, a ruler, or a sandbox.

## Phoneme Blending

### Application 2: Blending with Blocks

**Object:** Practice phoneme blending by manipulating blocks.

**To Teach:**

1. Give each student three manipulatives - blocks, Unifix cubes, or any manipulatives that are the same size, but colored differently. (Avoid using round objects or other "distracters.")
2. The teacher starts with two blocks and tells the students that each block represents a sound. The teacher moves one block forward and says /u/. The teacher touches another block and says /p/. Blocks are then put together slowly (stretching out the /u/) and when the blocks connect, the /p/ is pronounced. Students can hear and see that when /u/ is connected to /p/, the word is "up."
3. Students should practice with the teacher many times before being expected to do this on their own.
4. Correct for left to right placement of blocks.
5. When students are proficient with two sound words, work with three sound words. Use the same procedure for saying the sound when the block is touched, putting the sounds together, and then pronouncing the whole word.
6. The level of difficulty may be increased by using more sounds and blocks and by switching from plain blocks to letter tiles.

**Note:** When the teacher is demonstrating and practicing with the students, she needs to make sure she puts the block for the first sound of the word on her right (the students' left as they are facing her). The teacher's left side is the end of the word for the students.

## Phoneme Segmentation

Phoneme Segmentation	Breaking a word into its separate sounds and saying each sound as it is tapped out, counted, or signaled.	Teacher: How many sounds are in <b>grab</b> ? Children: /g/ /r/ /a/ /b/. Four sounds.
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### Application 2: Puppet Play

**Object:** The teacher uses a puppet to model segmentation, and the students “communicate” with the puppet by practicing the segmentation of words.

**To Teach:** Choose a puppet, small stuffed animal, or animal toy.

1. Explain to your students that Teddy (or whatever name you choose for your puppet) has a funny way of talking. If he wants to say, “**bat**,” he says it like this: /b/ /a/ /t/. Model several examples for the students.
2. Today we’re going to try to learn to talk like Teddy, so he (or she) knows what we are saying.
3. Give your students a word and help them “talk like Teddy” by separating the word into phonemes. Practice segmenting together before expecting students to segment individually.
4. As students are saying the phonemes, they may also clap, tap, or indicate with fingers the number of phonemes. The puppet could also be making one step or hop as each phoneme is pronounced. (Remember: As you are facing your students, the puppet should move from your right to your left; your left is the end of the word for the students.)

## Phoneme Segmentation

### Application 2: The Splits (with blocks)

**Object:** Practice phoneme segmentation by manipulating blocks.

**To Teach:**

1. Give each student three manipulatives – blocks, Unifix cubes, or any manipulatives that are the same size, but colored differently. (Avoid using round objects or other “distracters.”)
2. Show the students two blocks that are adjacent to each other and tell them that these blocks represent the word “**mow**.” Students say, “**mow**.”
3. Point to the first block (the one on your right, the students’ left) and say /**m**/. Point to the other block and say /**o**/. Explain to the students that each block stands for one sound and that we can split the blocks apart and identify each sound by itself. Separate the blocks just a little, and say /**m**/ pause /**o**/. Separate the two blocks even further, and say the sounds with a longer pause in between.
4. Students should practice with the teacher many times before being expected to do this on their own.
5. When students are proficient with two sound words, add a third sound (third block). Use the same procedure for saying the sounds when the blocks are touched and separating the sounds.
6. The level of difficulty may be increased by using more sounds and blocks.

**NOTE:** After the students understand phoneme segmenting, and know some letter names, replace plain blocks with letter tiles.

## Phoneme Deletion

Phoneme deletion	Recognizing the word that remains when a phoneme is removed from another word.	Teacher: What is <b>smile</b> without the /s/? Children: <b>Smile</b> without the /s/ is mile.
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### Application 1: What's My Word? Take-Away-A-Sound Version

**Object:** To hear and say new words when a sound is taken away.

**To Teach:**

1. Start by telling your students, "Today we are going to play a "take-away" game; but instead of using numbers like in math, we're going to take away sounds. When I say, 'What's my word?' you'll say the new word."
2. The teacher selects word pairs that will be used. It is usually wise to start with three phoneme words.
3. The teacher demonstrates by saying the word, "**cat**."
4. The students repeat the word, "**cat**."
5. The teacher next says, "Take away the /c/ sound. What's my word?"
6. Students respond with "**at**."
7. The teacher and students repeat words and/or sounds as needed.
8. Play continues with the teacher giving new words.

## Application 1: What's My Word? Take-Away-A-Sound Version (cont.)

### Variations:

1. The teacher may vary this game by saying the word "cat" and then saying the word "at" and asking what sound was taken away. Students respond /c/.
2. Deleting sounds in the end of words is also a variation of the game.

Teacher say "moon" and then "moo," what sound was taken away? /n/

Teacher says "letter" and then "let."

Teacher says "user" and then "use."

Teacher says "books" and then "book."

3. Nonsense words can also be used, but remember they are more difficult.

**Note:** When forming your word pairs for **What's My Word?** Avoid use phonemes that are digraphs such as **th**, **wh**, or **sh** and diphthongs such as **oo** or **oi**.

## Phoneme Deletion

### Application 2: Good-Bye, Block

**Object:** Practice phoneme deletion by manipulating blocks.

#### To Teach:

1. Give each student three - blocks, unifix cubes, or any manipulatives that are the same size.
2. Show the students three blocks that are adjacent to each other and tell them that these blocks represent the sound in the word "meat." Students say, "Meat."
3. Point to the first block (the one on your right, the students' left) and say /m/. Point to the next block and say /e/. Point to the last block and say /t/. Explain to the students that each block stands for one sound.
4. Now separate the first block from the others (leave the second two blocks connected), and show the students that you are looking at and hearing /m/ pause /et/. Remove the /m/ block completely, "Good-bye /m/" and show them that the remaining word is "eat."
5. Students should practice with the teacher many times before being expected to do this on their own.
6. The level of difficulty may be increased by using more sounds and blocks.

**Note:** After the students understand phoneme deletion, and know some letter names, replace the plain blocks with letter tiles.

## Phoneme Addition

Phoneme addition	Making a new word by adding a phoneme to an existing word.	Teacher: What word do you have if you add /s/ to the beginning of <b>park</b> ? Children: <b>Spark</b> .
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### Application 1: What's My Word? Add-A-Sound Version

**Object:** To hear and say new words when a sound is added.

**To Teach:**

1. Start by telling your students, "Today we are going to add a sound to a word, just like we add in math. When I say, 'What's my word?' you'll say the new word."
2. Select a word pair. Start with two-phoneme words (e.g., **it-hit**, **at-bat**, **up-pup**).
3. Demonstrate by saying, for example the word, "**at**."
4. The students repeat the word, "**at**."
5. Next you say, "Add the /c/ sound to the beginning. What's my word?"
6. Students respond with, "**cat**."
7. You and students repeat words and/or sounds as needed.
8. Play continues as you give new word pairs.

**Variations:**

1. You may vary this game by saying the word "**at**" and then saying the word "**cat**" and asking what sound was added.
2. Adding sounds in the middle and at the end of words is also a variation of this game.
3. Nonsense words can also be used, but remember they may be more difficult.



## Phoneme Addition

### Application 2: Hello, Block

**Object:** Practice phoneme addition by manipulating blocks.

**To Teach:**

1. Give each student three manipulatives - blocks, Unifix cubes, or any manipulatives that are the same size, but colored differently. (Avoid using round objects or other "distracters.")
2. Point to the first block (the one on your right, the students' left) and say /i/. Point to the other block and say /n/. Explain to the students that each block stands for one sound. Show the students two blocks that are adjacent to each other and tell them that these blocks represent the word "in." Students say, "In."
3. Show the students that new words can be made by introducing a new block. Hold a third block and call it /p/. When you add the /p/ block to the /in/ block say "Hello, /p/" tell the students that the new word is "pin."
4. Students should practice with you many times before being expected to do this individually.
5. The level of difficulty may be increased by using more phonemes and blocks.

**NOTE:** After the students understand phoneme segmenting, and know some letter names, replace plain blocks with letter tiles.

## Phoneme Substitution

Phoneme substitution	Substituting one phoneme for another to make a new word.	Teacher: The word is <b>bug</b> . Change <b>/g/</b> to <b>/n/</b> . What's the new word? Children: <b>Bun</b> .
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### Application 1: Silly Sound Switch

**Object:** To take familiar phrases from books or nursery rhymes and substitute sounds to make a silly phrase.

#### To Teach:

1. Start by telling your students, "Today we are going to take a phrase from a song (or nursery rhyme) and make a silly sound switch."
2. Pre-select the phrase that will be used. Think of a phrase that is repeated or is memorable.
3. Demonstrate by saying for example, "Row, row, row, your **boat**, gently down the stream."
4. The students repeat the phrase.
5. The teacher next says, "Let's switch a new sound for the **/b/** in **boat**. Let's try **/g/**. What's the new phrase?"
6. Students respond, "Row, row, row, your **goat**, gently down the stream."
7. Play continues as you and the students give new sounds for the identified word and say the phrase with the silly switch.

## Application 1: Silly Sound Switch (continued)

### Variations:

1. You may vary this game by switching the sound for several identified words instead of just one. For example: /m/ - "Mow, mow, mow, your boat, gently down the stream." /sh/ - "Show, show, show, your boat, gently down the stream."
2. Switch sounds at the end of identified word/words.
3. Another variation is to turn the identified word/words into nonsense words. Remember they are more difficult.

**Note:** The teacher should identify and try switching sounds in the phrase first before playing the game with students to avoid any objectionable words.

## Phoneme Substitution

### Application 2: Trading Places

**Object:** Practice phoneme substitution by manipulating blocks.

**To Teach:**

1. Give each student three manipulatives – blocks, Unifix cubes, or any manipulatives that are the same size, but colored differently. (Avoid using round objects or other “distracters.”)
2. Put three blocks together and tell the students that these blocks represent the word “tack.” Students say, “tack.”
3. Explain to the students that each block stands for one sound. Point to the first block (the one on your right, the students’ left) and say /t/. Point to the middle block and say /a/. Point to the final block and say /k/.
4. Show the students that you can substitute or “trade places” with some of the blocks. Hold a block in your hand and call it /s/. Model the process of removing the /t/ from the beginning of the blocks and replacing it with /s/. Now the word is “sack.”
5. Students should practice with the teacher many times before being expected to do this individually.
6. After students have worked on initial sounds, other lessons may move on to “Trading Places” with final sounds.
7. Medial sounds (e.g., changing “cup” to “cap”) can also be practiced.

**Note:** After the students understand phoneme manipulation, the natural progression for integrating phonemes and phonics is to replace the plain blocks with alphabet tiles.

## Subsection 2

### Jigsaw Teaching

## Jigsaw Teaching: Small Group Practice

Term	Notes from Jigsaw Teaching
Phoneme Isolation	
Phoneme Identification	
Phoneme Categorization	
Phoneme Segmentation	
Phoneme Blending	
Phoneme Deletion	
Phoneme Addition	
Phoneme Substitution	

## Subsection 3 Assessment

# ASSESSMENT TOOL #1

## Yopp-Singer Test of Phoneme Segmentation

**Description:** The Yopp-Singer Test of Phoneme Segmentation is a list of 22 common words. Students are given the words and asked to break each word apart (segmentation). This test is administered individually and takes about five to ten minutes per student.

This test was originally designed for English speaking kindergartners; however, it has also proven useful with first grade students and older individuals. (Note: Data have not been established regarding the use of this tool with English Language Learners because of the following variables: the potential difficulty with task directions and word familiarity, and some speech sounds that exist in English may not be meaningful, or even exist in the student's language.)

**Using the results:** Since a relationship has been established between phonemic awareness, success in reading, and spelling acquisition, Yopp and Singer's assessment is especially helpful in early identification of areas where further instruction is needed. All or mostly correct responses indicate phonemic awareness, some correct responses suggest emerging awareness, and only a few correct responses suggest intervention is necessary. The teacher should observe and make notes on the list of test items; these will be helpful when planning instruction.

**Note:** Since the actual phonemes are not designated on the attached assessment, it is important to make sure the person administering the assessment knows exactly how many phonemes are in each word and the sound of each phoneme.

Yopp, H. (1995). A test for assessing phonemic awareness in young children. *The Reading Teacher*. 49(1), 20-29.



## Yopp-Singer Test of Phoneme Segmentation

Name \_\_\_\_\_ Date \_\_\_\_\_ Score (# correct) \_\_\_\_\_

**Directions:** Today we're going to play a word game. I'm going to say a word and I want you to break the word apart. You are going to tell me each sound of the word in order. For example, if I say "old," you should say /o/-/l/-/d/. Let's try a few together.

**Practice items:** (Assist in segmenting if necessary). Ride, go, man

**Test items:** (Circle those items that the student correctly segments; incorrect responses may be recorded on the blank line following the item.)

- |               |                 |
|---------------|-----------------|
| 1. dog _____  | 12. lay _____   |
| 2. keep _____ | 13. race _____  |
| 3. fine _____ | 14. zoo _____   |
| 4. no _____   | 15. three _____ |
| 5. she _____  | 16. job _____   |
| 6. wave _____ | 17. in _____    |
| 7. grew _____ | 18. ice _____   |
| 8. that _____ | 19. at _____    |
| 9. red _____  | 20. top _____   |
| 10. me _____  | 21. by _____    |
| 11. sat _____ | 22. do _____    |

(Hallie Kay Yopp grants permission for this test to be reproduced. The author acknowledges the contribution of the late Harry Singer to the development of this test.)

## Assessment Tool #2

### Kirwan Assessment

**Description:** The Kirwan Assessment measures the following skills: onset and rime blending, phoneme blending, phoneme isolation, phoneme segmentation, and letter/sound correspondence. The assessment is administered individually. Passing scores are listed on each subtest. Once a student fails a subtest, no more sections are administered at that time. Students who do not pass every section are taught phonemic awareness and reassessed as the year progresses.

**Using the results:** Results may be used to: inform instruction, identify small groups within the classroom that need to receive additional intervention, and to help determine pacing of instruction. (The author has found that students with more phonemic awareness on this assessment move more quickly through beginning reading tasks).

Kirwan, C. (2002). *Kirwan Assessment*. Longview, WA.  
(Permission granted to copy for use in schools. Not to be reproduced for sale.)

## Kirwan Assessment

Name \_\_\_\_\_

Date \_\_\_\_\_

### A. Oral Blending of Onset-Rime

**Directions:** Ask the student to try to identify the word you are saying. Example: "/m/.../om/, what word did I say?" Other practice examples: /b/.../at/ (bat), /s/.../it/ (sit).

1. s...eem \_\_\_\_\_

6. r...ide \_\_\_\_\_

2. th...en \_\_\_\_\_

7. n...ot \_\_\_\_\_

3. l...and \_\_\_\_\_

8. m...ake \_\_\_\_\_

4. d...ark \_\_\_\_\_

9. sh...ack \_\_\_\_\_

5. m...oose \_\_\_\_\_

10. w...ish \_\_\_\_\_

**Scoring:** 9 or more is a pass. Score \_\_\_\_/10

### B. Oral Blending of Phonemes

**Directions:** Ask the student to try to guess the word you are saying. Example: "/d/.../a/.../d/ (dad), what word did I say?" Other practice examples: /b/.../e/.../t/ (beet), /w/.../ä/.../l/ (wall).

1. th...e \_\_\_\_\_

6. r...o...d \_\_\_\_\_

2. b...a...ck \_\_\_\_\_

7. j...e...t \_\_\_\_\_

3. w...i...n \_\_\_\_\_

8. b...o...ne \_\_\_\_\_

4. t...r...ee \_\_\_\_\_

9. a...sh \_\_\_\_\_

5. f...oo...l \_\_\_\_\_

10. d...r...aw \_\_\_\_\_

**Scoring:** 9 or more is a pass. Score \_\_\_\_/10

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## Kirwan Assessment (continued)

Name \_\_\_\_\_

Date \_\_\_\_\_

### C. Identifying Initial Consonant

**Directions:** Ask the child to tell you what sound he/she hears at the beginning of the word. Example: “/C/ is the sound I hear at the beginning of *car*.” What sound do you hear at the beginning of *dog*?” /d/. Other practice examples: *ran* /r/, *see* /s/, *Tim* /t/.

1. meet \_\_\_\_\_

5. hear \_\_\_\_\_

2. sand \_\_\_\_\_

6. it \_\_\_\_\_

3. leg \_\_\_\_\_

7. bike \_\_\_\_\_

4. pant \_\_\_\_\_

8. win \_\_\_\_\_

**Scoring:** 7 or more is a pass.

Score \_\_\_\_/8

### D. Identifying Final Consonant

**Directions:** Ask the child to tell you what sound he/she hears at the end of the word. Example: “/t/ is the sound at the end of *hat*.” “Tell me the sound that you hear at the end of *park*?” /k/. Other practice examples: *bag* /g/, *leap* /p/.

1. clam \_\_\_\_\_

5. sky \_\_\_\_\_

2. base \_\_\_\_\_

6. sniff \_\_\_\_\_

3. free \_\_\_\_\_

7. pay \_\_\_\_\_

4. gone \_\_\_\_\_

8. nest \_\_\_\_\_

**Scoring:** 7 or more is a pass.

Score \_\_\_\_/8

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## Kirwan Assessment (continued)

Name \_\_\_\_\_

Date \_\_\_\_\_

### E. Phoneme Segmentation

**Directions:** Ask the student to see if he/she can break a word apart. Example: "The word is **man**. Listen to me break the word apart. /m/ .. /a/ .. /n/ ." Other practice examples: /n/ ... /o/ **no**, /t/ ... /i/ ... /p/ **tip**, /s/ ... /e/ **see**.

- |               |               |
|---------------|---------------|
| 1. add _____  | 6. play _____ |
| 2. get _____  | 7. it _____   |
| 3. ripe _____ | 8. sun _____  |
| 4. he _____   | 9. do _____   |
| 5. not _____  | 10. cry _____ |

**Scoring:** 9 or more is a pass. Score \_\_\_\_/10

### F. Linking Letters to Sounds

**Directions:** From the choice of three letters, ask the student to point to the letter that represents the beginning sound of the word given. Example: "Point to the letter that says the sound you hear at the beginning of the word **sat**". **s, p, m**, (s). Other practice examples: **tan s, m, t**, (t), **deck l, d, r**, (d).

- |                        |                          |
|------------------------|--------------------------|
| 1. laugh l, s, i _____ | 5. mutter u, h, m _____  |
| 2. frog n, t, f _____  | 6. cloud a, c, n _____   |
| 3. water d, w, e _____ | 7. gather p, i, g, _____ |
| 4. otter o, b, j _____ | 8. answer o, a, k _____  |

**Scoring:** 7 or more is a pass. Score \_\_\_\_/8

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## Subsection 4

### *CD/Video Modeling*

## Contexts for CD/Video Viewing

### CD/Video Viewing

**Context #1:** Phonemic Awareness - Kessler Elementary School, Longview School District, Kindergarten and 1<sup>st</sup> Grade

**Focus:** Phonemic Awareness training with small groups of students.

**Context #2:** Oral Language Development - Marti MacPhee, T.T. Minor Elementary School, Seattle School District, 4-5 year olds

**Focus:** Clapping, rhyming, fingerplay, singing, listening games, oral language development in centers

## CD/Video Modeling Observation Chart

<p>What activities for teaching Phonemic Awareness did the teacher use?</p>	<p>What classroom management strategies did the teacher use to support instruction?</p>
<p>How did the teacher assess, engage, or reinforce student success?</p>	<p>What else did you observe? (e.g. other literacy enrichment, physical environment, and/or accommodations)</p>



## Subsection 5

### Action Planning

## Action Planning: How Can I Put My New Learnings into Practice?

1. **Review:** Look over the notes you made during the Think-Ink-Pair-Share activities completed at the beginning of this session.
  
2. **Revise:** What additions or revisions can you make to your notes?
  
3. **Plan:** What are my next steps to incorporate phonemic awareness purposefully into my lesson plans tomorrow?

How will those plans meet the instructional needs of my students?

Using the form on the next page, **construct an action plan** that will help you address the instructional needs of your students.

# Constructing an Action Plan to Meet the Instructional Needs of Students

What plans can I try tomorrow?	How will the plans address the instructional needs of my students?

## SECTION 5: SUMMARY

### Revisiting Terminology Knowledge Rating Chart

Revisit the Terminology Knowledge Rating Chart that you completed at the beginning of the session to compare your knowledge of the language of phonological and phonemic awareness.

#### Terminology Knowledge Rating Chart

Phonemic Awareness Term	How familiar are you with the term?	Can you give an example?
1. grapheme		
2. onset and rime		
3. phoneme		
4. phonemic awareness		
5. phoneme blending		
6. phoneme categorization		
7. phoneme isolation		
8. phoneme segmenting		

## Evaluation and Feedback

1. What did you find most useful about this session?
2. What did you find least useful?
3. What additional information, materials, or resources would be useful?

## APPENDIX B: SHORT MATRIX

Volume II, Part 1: Phonemic Awareness					
Structure of Language	Learner Processes	Teaching Methods	Assessment	Motivation	Linkage to Other Reader Acquisitions
<ul style="list-style-type: none"> <li>Phonemes – the smallest units of sound in words</li> <li>44 phonemes in English</li> <li>70 different ways to spell them.</li> </ul>	<ul style="list-style-type: none"> <li>Learner becomes aware of phonemes through tasks such as phoneme isolation, phoneme identity, phoneme blending, phoneme segmentation, and phoneme deletion</li> <li>Students with LD/RD may have difficulty acquiring phonemic awareness and require special instruction that focuses on mouth movements</li> <li>ELL may require special instruction, especially with phonemes that are not present in native language</li> </ul>	<ul style="list-style-type: none"> <li>Begin with easiest tasks – phoneme isolation and identity</li> <li>Incorporating letters into phonemic awareness tasks when students know names and sounds of letters</li> <li>Use of letters moves students closer to reading and spelling tasks</li> </ul>	<ul style="list-style-type: none"> <li>Instructional tasks can be used to assess students' phonemic awareness</li> <li>If students know letters, phonemic segmentation is assessed by asking them to write sounds that are dictated to them</li> </ul>	<ul style="list-style-type: none"> <li>Games</li> <li>Fun activities</li> <li>Fun stories</li> </ul>	<ul style="list-style-type: none"> <li>Not an end but a means for learning reading and spelling</li> <li>Aids students in learning the alphabetic principle</li> <li>Phoneme blending aids decoding of novel words</li> <li>Phoneme segmentation aids the spelling of novel words</li> <li>Phoneme segmentation is important for remembering words by sight</li> <li>Bonding of the phonemes in the pronunciations of words to the letters aids the retention of spellings of words in memory</li> </ul>

## APPENDIX B: LONG MATRIX

### 1: STRUCTURE OF LANGUAGE

Phonemic awareness consists of the ability to manipulate sounds in spoken words. The smallest units of sound in the English language are phonemes. English has about 44 different phonemes. Phonemes are blended to form words, for example, the word cat has three phonemes, /k/, /a/, /t/. Phonemes correspond to graphemes (single letters or two-letter combinations) in the spelling system. In order to learn to read and spell, children must acquire knowledge of the connections between phonemes in spoken words and graphemes in written words (fundamental premise).

#### 2: Learner Processes

Phonemic awareness is one of the best predictors of how well children will learn to read when formal instruction begins. There are several types of phonemic awareness, each illustrated with an example:

- phoneme isolation: Tell me the first sound in paste (/p/)
- phoneme identity: Tell me the sound that is the same in boy and bell (/b/)
- phoneme blending: Put these sounds together and tell me the word: /s/, /k/, /i/, /p/ (skip)
- phoneme segmentation: Tell me the separate sounds in shape: /sh/, /a/, /p/
- phoneme deletion: Say smile. Now say what is left if you take out /s/ (mile)

The purpose of teaching phonemic awareness is to enable beginners to break the alphabetic code and recognize how the separate sounds in pronunciations of words map onto letters in their spellings.

Typical beginning readers can acquire phonemic awareness with a limited amount of instruction. Children at risk of developing reading disabilities, those with learning disabilities or reading disabilities (LD/RD) require more instruction and practice because they have much more difficulty acquiring phonemic awareness. English language learners (ELL) may need special instruction so that they learn English phonemes that are not present in their native language.

### 3: TEACHING METHODS

Instruction to teach phonemic awareness typically begins in kindergarten before children have received formal reading instruction. Students begin by practicing the easiest tasks, phoneme isolation and phoneme identity. Various types of games are used to provide practice.

Children's knowledge of the names and sounds of letters increases the effectiveness of phonemic awareness instruction. Incorporating letters into phonemic awareness tasks is advised. For example, in a phoneme segmentation task, as they say the separate sounds in words, they can select letter tiles that represent those sounds. Using letters helps to clarify which sounds are in words, and it moves children closer to reading and spelling tasks where they must use letters.

Children with LD/RD can be helped to acquire phonemic awareness by drawing attention to the mouth movements involved in producing spoken words. Children may be taught labels for mouth movements and can manipulate sounds in words by monitoring mouth movements.

#### 4: ASSESSMENT

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To assess children's phonemic awareness, any of the tasks listed above might be used. Beginners are only able to perform the easier tasks. Once children move into reading and attain some skill, harder tasks such as deletion become an appropriate way of assessing phonemic awareness. In assessing phonemic segmentation, children who know letters can write the letters corresponding to the sound they hear in words.

#### 5: MOTIVATION

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In order to motivate young children to practice and learn phonemic awareness, games and other informal activities as well as stories can be used.

#### 6: LINKAGE TO OTHER READER ACQUISITIONS

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Phonemic awareness is not learned as an end but as a means to the acquisition of word reading and spelling skills. Children need to acquire awareness of those phoneme segments that will enable them to make sense of the writing system and link letters in spellings to phonemes in the pronunciations of words.

Different types of phonemic awareness help children read and write words. Phoneme blending is an ingredient in decoding novel words that requires sounding out letters and combining them to say and recognize whole words. Phoneme segmentation is an ingredient in spelling novel words that requires writing letters for the separate sounds in the words. Phoneme segmentation is important for remembering how to read words by sight and remembering how to spell words accurately. In order to retain the spellings of words in memory, the letters must become bonded to phonemes in the pronunciations of words.

#### REFERENCES FOR PHONEMIC AWARENESS

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Alaska Department of Education and Early Development (2003). Reading report card. Retrieved from <http://www.eed.state.ak.us/stats/>, 6/5/2004.

Ambruster, B. & Osborn, J. (2001). Put reading first: The research building blocks for teaching children to read. Jessup, M.D.: Partnership for Reading, [www.nifl.gov](http://www.nifl.gov).

Barker, T. A., Torgesen, J. A. & Wagner, R. K. (1992). The role of orthographic processing skills on five different reading tasks. *Reading Research Quarterly*, 27, 334-45.

Bell, Nanci (1997). *Seeing Stars: Symbol Imagery for Phonemic Awareness, Sight words and Spelling*. San Luis Obispo, C.A.: Gander Publishing.

Bernthal J. E., & N. W. Bankson (Eds.). (1994). *Child Phonology: Characteristics, Assessment, and Intervention with Special Populations*. New York: Thieme.

Blachman, B. A., Tangel, D. M., Ball, E. W., Black, R. & McGraw, C. K. (1999). Developing phonological awareness and word recognition skills: A two-year intervention with low-income, inner-city children. *Reading and Writing: An Interdisciplinary Journal*, 11, 239-273.

Bruck, M. (1992). Persistence of dyslexics' phonological awareness deficits. *Developmental Psychology*, 28, 874-886.

Calfee, R.C., & Piontkowski, D.C. (1981). The reading diary: acquisition of decoding. *Reading Research*



Quarterly, 3, 346-372.

Calvert, Sandra L. (1991). Impact of singing on students' verbatim recall and learning.

Coles, R.W., & Goodman, Y. (1980). Do we really need those oversized pencils to write with? *Theory into Practice*, 19, 194-196.

Cossu, G. (1997). Domain-specificity and fractionability of neuropsychological processes in Literacy Acquisition. In Pontecorvo, C. (Ed.) *Writing development: An interdisciplinary view*, 243-258. Philadelphia, PA: John Benjamin's Publishing.

Ehri, L. C. (1992). Reconceptualizing the development of sight word reading and its relationship to recoding. In Gough, P.B., Ehri, L.C. & Treiman, R. (Eds.) *Reading Acquisition*, 107-143. Hillsdale, NJ: Erlbaum, Associates.

Felton, R. H. (1993). Effects of Instruction on the Decoding Skills of Children with Phonological-Processing Problems. *Journal of Learning Disabilities*, 26, 583-589.

Foorman, B.R., & Liberman, D. (1989). Visual and phonological processing of words: A comparison of good and poor readers. *Journal of Learning Disabilities*, 22, 349-355.

Fry, E. (1994). *1000 Instant Words: The Most Common Words for Teaching Reading, Writing and Spelling*. Laguna Beach, C.A.: Laguna Beach Educational Books.

Gillam, R.B., & van Kleeck, A., (1996). Phonological awareness training and short-term working memory: Clinical implications. *Topics in Language Disorders*, November, 72-81.

Heilman, K. M., Voeller, K. & Alexander, A. W. (1996). Developmental dyslexia: A motor-articulatory feedback hypothesis. *Annals of Neurology*, 39, 407-12.

Henderson, L., & Chard, J. (1980). The reader's implicit knowledge of orthographic structure. In U. Frith (Ed.), *Cognitive processes in spelling*. London: Academic Press.

Johnston, R. S., Anderson, M., & Holligan, C. (1996). Knowledge of the alphabet and explicit awareness of phonemes in pre-readers: The nature of the relationship. *Reading and Writing: An Interdisciplinary Journal*, 8, 217-234.

Lance, D. M., Swanson, L. A., & Peterson, H. A. (1997). A validity study of an implicit phonological awareness paradigm. *Journal of Speech-Language, and Hearing Research*, 40, 1002-1010.

Lander, K., Frith, U., Wimmer, H. (1996). Intrusion of orthographic knowledge on phoneme awareness: Strong in normal readers, weak in dyslexic readers. *Applied Psycholinguistics*, 17, 1-14.

Lindamood, C.H. & Lindamood, P.C. (1975). *Auditory discrimination in depth* Austin, TX: PRO-ED.

Lindamood, C.H., & Lindamood, P.C. (1979). *Lindamood Auditory Conceptualization Test*. Austin, TX: DLM Teaching Resources.

Lindamood, P. C., Bell, N., & Lindamood, P. (1992). Issues in phonological awareness assessment. *Annals of Dyslexia*, 42, 242-259.

Lindamood, P. C., Bell, N., & Lindamood, P. (1997). Sensory-cognitive factors in the controversy over

reading instruction. *The Journal of Developmental and Learning Disorders*, 1, 143-182.

Lindamood, P.C., & Lindamood, P. (1998). *Lindamood phoneme sequencing program for reading, spelling, and speech*, 3rd edition, Austin, TX: PRO-ED.

Lindamood-Bell Learning Processes (2000). *The role of symbol imagery in phonological and orthographic processing*. Research presented at the Lindamood-Bell™ 9th Annual International Conference, March 2001.

Lyon, R.G., (2001, March). *Measuring success: Using assessments and accountability to raise student achievement*. Paper presented to the Subcommittee on Education Reform Committee on Education and the Workforce, U.S. House of Representatives, Washington, D.C.

Mykelbust, H. R. (1973). *Development and disorders of written language Volume 2..* New York: Grune & Stratton.

National Reading Panel (2002) Report. *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implication for reading instruction – reports of the sub-groups*. National Reading Panel, retrieved 6/5/04 from [www.nationalreadingpanel.org](http://www.nationalreadingpanel.org).

Olsen, R., Wise, B., Johnson, M. & Rack, J. (1994). *Measurement of word recognition, orthographic and phonological skills*. In G.R. Lyon (Ed.). *Frames of reference for the assessment of learning disabilities*, 243-77. Baltimore, MD: Brookes Publishing.

Phillips, G. (2001, April 24). *No change in average NCE Statistics fourth-grade reading scores*. National Center for Educational Statistics. Article posted to <http://educationnews.org>.

Pratt, A. C., Brady, S. (1988). *Relationship of phonological awareness to reading disability in children and adults*. *Journal of Educational Psychology*, 80, 319-323.

Scanlon, D. M. & Vellutino, F. R. (1997). *A comparison of the instructional backgrounds and cognitive profiles of poor, average, and good readers who were initially identified as at risk for reading failure*. *Scientific Studies of Reading*, 1, 191-215.

Shaywitz, B. & Shaywitz, S. (2004). *Development of left occipitotemporal systems for skilled reading in children after a phonologically-based intervention*. *Biological Psychiatry*, 55, 926-933.

Singson, M, Mahoney, D. & Mann, V. (2000). *The relation between reading ability and morphological skills: Evidence from derivational suffixes*. *Reading and Writing: An Interdisciplinary Journal*, 12, 219-252.

Spaulding, R.B., & Spaulding, W.T. (1962). *The Writing Road to Reading*, New York: William Morrow & Co. 1962, p. 74.

Stuart, M. (1999). *Getting ready for reading: Early phoneme awareness and phonics teaching improves reading and spelling in inner-city second language learners*. *British Journal of Psychology*, 69, 587-605.

Swank, L. K. (1995). *Phonology, metaphonolgy, and reading: Why the confusion?.* *The Clinical Connection*, 9, 4-8.

Torgesen, J. K., Wagner, R. K., & Rahotte, C. A. (1994). *Longitudinal studies of phonological processing and reading*. *Journal of Learning Disabilities*, 27, 276-286.

Vail, Priscilla (1991). *Common Ground Whole Language and Phonics Working Together*. Rosemont, N.J.: Modern Learning Press.

Vellutino, F. R., Scanlon, D. M., & Tanzman, M.S. (1994). Components of reading ability: Issues and problems in operationalizing word identifications, phonological coding, and orthographic coding. In G.R. Lyon (Ed.), *Frames of reference for the assessment of learning disabilities* (pp. 279-332). Baltimore, M.D.: Brookes. Wagner, R. K. & Torgesen, J. K. (1987). The nature of phonological processing and its causal role in the acquisition of reading skills. *Psychological Bulletin*, 101, 192-212.

Worthington, P. (2003, Feb. 17). Scientifically based reading research. Presentation remarks made at the Alaska Statewide Special Education Conference, Anchorage, AK.

Yavas, M. S., Gogate, L. J. (1999). Phoneme awareness in children: A function of sonority. *Journal of Psycholinguistic Research*, 28, 245-261.

**APPENDIX C: SUPPORT MATERIALS**

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## OPTIONAL READING

### FROM BEGINNING SPEECH TO READING:

### MULTI-SENSORY LEARNING AND WHAT IT IS ALL ABOUT

#### Hearing/Listening

Let's go back to the time when you were just an infant. At that time, your first fully developed nervous sense was that of HEARING. Sudden and unexpected sounds would startle you and you would probably start to cry. As your HEARING sense got better and you started to tune in to the sounds around people, you realized that the people around you were making sounds.

#### Seeing

Meanwhile, your VISUAL sense was getting stronger, and you SAW that the people were SPEAKING. Then, one day you thought to yourself: "I want to make the same sounds that they do."

#### Speaking

You loved mama. And because you had HEARD the word "mama" so many times, you were soon able to associate it with your mama. You had already SEEN how the sounds seemed to come from the mouth of the person making the sound, and that person was moving her lips, mouth and tongue to make those sounds. So you decided to try it yourself.

Even though your lip, mouth and tongue muscles were yet very weak, with practice you soon could say the sound "mmm," and then the sound "aaa." Through much practice and repetition, practice and repetition, and still more practice and repetition, you were able to join the sounds "mmm" and "aaa" to SAY "mmmaa." With still more practice and repetition, you perfected your ability to SAY the whole word "mama." Through this same process you soon were able to SAY "dada" and "wawa."

1. First, you HEARD the sounds individually—mm---aaa---mmm---aaa.
2. Secondly, you SAW that the sounds were associated with the movement of the lips, mouth and tongue.
3. Thirdly, you imitated what you SAW, practicing those movements until you could do them as well as your elders.
4. Fourthly, you started SPEAKING each sound exactly as you HEARD it said.
5. Finally, you imitated what you HEARD your elders SAY, joining all the individual sounds to form the word "mama."

From HEARING the sounds, and then LISTENING to them, you finally advanced to SAYING them, so that by the time you were five or six years old, you could understand and use several thousand words. It does not matter which language you speak, the process is the same.

Then that magical day arrived...you entered through the doorway of your school. You are going to learn to read.

And, what is learning to read?" It is developing the ability to break the written code (ALPHABET),

which contains 26 letters (SYMBOLS). Now these 26 letters are combined in many different ways to form thousands and thousands of words. All the words that you have ever used – ever will use – in the English language are hidden within those letters (SYMBOLS) contained in this “secret code.” (ALPHABET)

Remember that we have already HEARD every sound (45 of them in the English language) that these letters and combinations of letters represent. We have already SPOKEN every one of those sounds. So, then, to break the secret (written) code, all that we have to do is to learn what these letters (SYMBOLS) represent in terms of their sounds. You will soon find out it is easy for most, challenging for many, and extremely difficult for some. Reading and writing all of those symbols is not a natural process like listening and speaking.

### Writing

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Once we have learned the above, we are able to WRITE these sounds in SYMBOL form by using letters. Then, by learning the rules of the language, we will know where and why to join which letters – or combinations of letters – to form words (a process called “spelling” or “encoding.” Would it not make sense therefore, to teach spelling/writing along with reading? Spelling/writing is a much more difficult task than reading, but done in a multi-sensory process it becomes much easier.

### NOW WE CAN READ

Through this process of learning to write and spell, we have “learned to read.”

Therefore, we **LEARN TO READ** so we can **READ TO LEARN**.

—Author Unknown

## LINKS LEARNING BIBLIOGRAPHY

- Adams, M. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: MIT Press.
- Adams, M., & Bruck, M. (1995). *Resolving the "Great Debate."* American Educator, 8, 7-20.
- Adams, M., Foorman, B., Lundberg, L., & Beeler, T. (1998). *Phonemic awareness in young children: A classroom curriculum*. Baltimore, MD: Brookes Publishing Co.
- Armbruster, B., Lehr, F., & Osborn, J. (2001). *Put reading first: The research building blocks for teaching children to read*. Jessup, MD: National Institute for Literacy.
- Blachman, B. (2000). *Phonological awareness*. In M. Kamil, P. Mosenthal, P. D. Pearson, & R. Barr (Eds.) *Handbook of reading research* (Vol. III, pp. 483-502). Mahway, NJ: Lawrence Erlbaum Associates, Inc.
- Cooter, R. B., Reutzel, D. R., & Cooter, K. S. (1998). *Sequence of development and instruction for phonemic awareness*. Unpublished manuscript.
- Hiebert, E. H., & Raphael, T. (1998). *Early literacy instruction*. Fort Worth, TX: Harcourt Brace College Publishers.
- Hiebert, E. H., Pearson, P.D., Taylor, B.M., Richardson, V., & Paris, S.G. (1998). *Every child a reader. Topic 2: Concepts of print, letter naming, and phonemic awareness*. Ann Arbor MI: Center for the Improvement of Early Reading Achievement (CIERA).
- International Reading Association. (1998). *Phonemic awareness and the teaching of reading: A position statement*. Newark, DE: Author.
- International Reading Association. (2001). *International Reading Association's Summary of the (U.S.) National Reading Panel Report "Teaching children to Read."* <http://www.reading.org/advocacy/nrp/index.html>
- International Reading Association and the National Association for the Education of Young Children. (1998). *Learning to read and write: Developmentally appropriate practices for young children. A joint position statement of the International Reading Association (IRA) and the National Association for the Education of Young Children*. Newark, DE: Author.
- McGee, L., & Richgels, D. (2000). *Literacy's beginnings: Supporting young readers and writers*. Boston: Allyn and Bacon.
- National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. Chapter 2: Alphabets, Part I: Phonemic awareness instruction. <http://www.nichd.nih.gov/publications/nrp/smallbook.pdf>
- Neuman, S., Copple, C., & Bredekamp, S. (2000). *Learning to read and write: Developmentally appropriate practices for young children*. Washington, D.C.: National Association for the Education of Young Children.
- Schatschneider, C., Francis, D., Foorman, B., Fletcher, J., & Mehta, R. (1999). *The dimensionality of phonological awareness: An application of item response theory*. Journal of Educational Psychology, 91, 439-449.

Snow, C. E., Burns, M. S., & Griffin, P. (1998). *Preventing reading difficulties in young children*. Washington, D.C.: National Academy Press.

Yopp, H.K. (1992). *Developing phonemic awareness in young children*. *The Reading Teacher*, 45, 696-703.

Yopp, H.K., & Yopp, R.H. (2000). *Supporting phonemic awareness development in the classroom*. *The Reading Teacher*, 54, 130-143.



# ALASKA READING

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## Volume II: Alphabet Foundation

### Part 2: Phonics by Links Learning

#### PARTICIPANT GUIDE

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##### OBJECTIVES

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By the end of this session, participants will be able to:

- Understand the connection between phonics and reading development. (Linkage to Other Reader Acquisitions)
- Learn, model and teach using research-based instructional practices. (Teaching Methods)
- Learn how to analyze reading programs and supplemental materials for research –based instructional practices. (Learner Process)
- Understand how to apply key learnings in a plan for the classroom. (Learner Process)
- Understand why phonics must be taught explicitly and systematically. (Teaching Methods)
- Recognize the predictable relationships between written letters and spoken sounds. (Structure of Language)
- Understand the purpose of teaching phonics. (Learner Process)
- Understand the meaning of letter/sound, sound/symbol and sound/spelling. (Structure of Language)
- Understand the importance of multi-sensory instruction when teaching phonics. (Teaching Methods)
- Understand ways to motivate students in phonics acquisition. (Motivation)
- Learn different models for assessing phonics mastery. (Assessment)

##### SUMMARY

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Understanding phonics and the purpose of phonics instruction involves thinking about how written language was created. Spoken language had existed for a very long time before the need for written communication brought about the invention of various alphabets. When people began inventing the letters of an alphabet to represent the sounds of their spoken language, they eventually saw they understood it would be important for the same letter or letters to be used each time a particular sound was represented. The rules they created to establish consistency in how speech sounds are represented in print are what we now call phonics rules.

Therefore, we define phonics as a set of rules that specify the relationship between letters in the spelling of words, and sounds of spoken language. For the English language, these relationships are predictable, but not completely consistent. However, they are consistent enough to be very useful to young children in helping them decode unfamiliar words (Foorman et al., 1998).

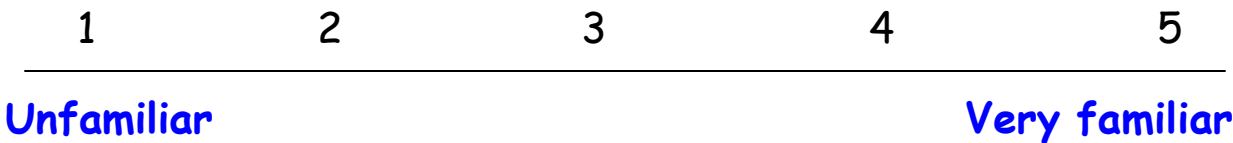
**PHONICS PARTICIPANT’S GUIDE**

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# What Do I Already Know About Phonics?

## THINK - INK - PAIR - SHARE

**THINK - INK:** Rate your familiarity with phonics by placing an X on the continuum and completing the Guiding Questions Chart.



### Guiding Questions Chart

What are some terms or labels people use when discussing phonics?	What can children who understand phonics skills do?
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# What Is Phonics?

Phonics is knowing the **relationship** between **printed letters** (graphemes) of written language and the **individual sounds** (phonemes) of spoken language.

The following terms or labels are often used when people discuss phonics:

- Graphophonic cues
- Letter/sound relationship or letter/sound correspondence
- Sound/symbol relationship or sound/symbol correspondence
- Sound/spellings

Children who understand phonics skills can

- tell you which letter makes the first sound in *bat*
- tell you which letter makes the last sound in *car*

(Armbruster, Lehr, & Osborn, 2001; IRA's Position Statement on PA, 1998)

## What Is the Purpose for Teaching Phonics?



The purpose for teaching phonics is to enable students to learn and apply the alphabetic principle—the understanding that there are systematic and predictable relationships between written letters and spoken sounds.

Knowledge of these relationships contributes to the ability to comprehend or to read and understand words in isolation as well as in connected text.

Thus, the ultimate goal of teaching phonics is comprehension of written language.

(Armbruster, Lehr, & Osborn, 2001)

## How Are Phonemic Awareness and Phonics Connected?

<p>Phonemic Awareness</p>  <p>Sounds</p>	<p>Phonics</p>  <p>Letters</p>
<p>Given the spoken word "dog," the student can tell you that the beginning sound is /d/. (isolation)</p> <p>Given the separate sounds /d/ /o/ /g/, the student can tell you that they make up the spoken word "dog." (blending)</p> <p>Given the spoken word "hat," the student can separate the word into three separate sounds /h/ /a/ /t/ (segmentation).</p> <p>Given the spoken word "cart" and asked to take off the last sound, the student can say "car." (deletion)</p>	<p>Given the spoken word "dog," the student can tell you that the beginning letter is "d."</p> <p>Given the word "dog" in print, the student can make the sounds for each letter and blend them into the word "dog."</p> <p>Given the spoken word "hat," the student can tell you that the letters that spell the sounds in hat are h-a-t and/or write the word "hat."</p> <p>Given the spoken word "cart," the student can spell c-a-r-t. If the final "t" is erased/covered, the student can read the word as "car."</p>

Although phonemic awareness and phonics are two separate skills, phonemic awareness instruction is most effective for strengthening reading and spelling when children are taught to use the letters in conjunction with manipulating the phonemes.

(Armbruster, Lehr, & Osborn, 2001)

# Key Learning Goals



The participants will:

- Understand the connection between phonics and reading development.
- Learn, model, and teach using research-based instructional practices.
- Learn how to analyze reading programs and supplemental materials for research-based phonics instruction.
- Apply key learnings from this module in a plan for their classroom.

# Building Blocks for Teaching Children to Read

Comprehension  
of Written  
Text

Fluency  
Practice

Reading  
& Writing  
Connections

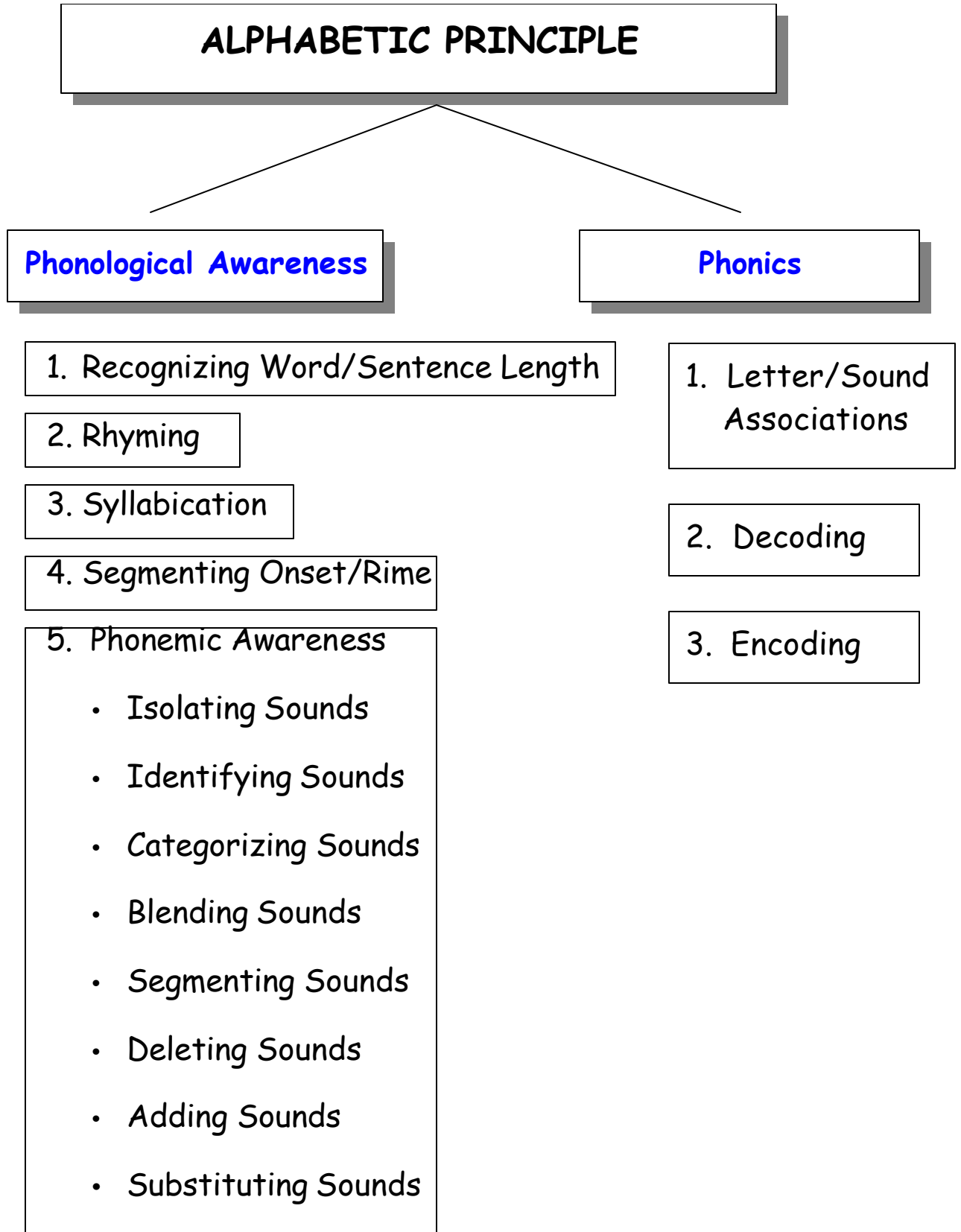
Vocabulary  
Development

Oral  
Language  
Development

Phonemic  
Awareness

Phonics  
Instruction





## What Are the Two Elements of Phonics?

- Decoding
- Encoding

### Decoding - Blending Sounds to Form Words

- Readers convert letters into sounds and blend them to form recognizable words. The letters might be individual letters; or digraphs (such as *th*, *sh*, *ch*); phonograms (such as *ay*, *igh*, *ow*), or spellings of common rimes (such as *ap*, *ot*, *ick*).
- The ability to convert letter subunits into sounds comes from the reader's knowledge of the alphabetic system.
- The primary way to build a sight vocabulary is to apply decoding or analogizing strategies to read unfamiliar words. These ways of reading words help the words become familiar by creating alphabetic connections that establish the words in memory as sight words.

### Encoding - Segmenting Words into Sounds for Spelling

- Systematic phonics instruction contributes in helping kindergartners and first graders apply their knowledge of the alphabetic system to spell words.
- Encoding reinforces the learning of decoding.
- Systematic phonics instruction for students older than first grade does not produce gains in spelling. For older students, spelling is less a matter of applying letter-sound relationships and more a matter of combining word parts.

(NRP, 2000)

# What Is Phonics Instruction?

**Phonics instruction** is reading instruction that teaches students the relationship between:

- the letters of written language (**graphemes**), and
- the individual sounds (**phonemes**) of spoken language.

## Why Is Phonics Instruction Important?

- **Phonics Instruction** leads to an understanding of the alphabetic principle—the systematic and predictable relationships between written letters and spoken sounds.
- **Systematic and explicit Phonics Instruction** significantly improves kindergarten and first grade children's word recognition, spelling, and reading comprehension.
- Systematic and explicit Phonics Instruction is **beneficial regardless of the socioeconomic status** of the students.

(Armbruster, Lehr, & Osborn, 2001, p. 14)

## What Does Systematic and Explicit Phonics Instruction Mean?

- **Systematic** -- the plan of instruction includes a carefully selected set of letter-sound relationships that are organized into a logical sequence.
- **Explicit** - the program provides teachers with precise directions for the teaching of these relationships.

The steps of explicit instruction typically include the following:

1. Direct explanation
2. Modeling
3. Guided practice
4. Application

(Armbruster, Lehr, & Osborn, 2001)

## What Does the National Reading Panel Report Say about Systematic Phonics Instruction?

### Systematic phonics instruction . . .

- Makes a bigger contribution to children's growth in reading than unsystematic or no phonics instruction. All approaches of systematic phonics instruction are more effective than no-phonics approaches in promoting substantial growth in reading.
- Is effective one-on-one, in small groups, and in whole class settings.
- Taught early proved much more effective than phonics instruction introduced after first grade.
- Is significantly more effective than non-phonics instruction in helping to prevent reading difficulties among at-risk students and in helping to remediate reading difficulties in disabled readers.
- Should be integrated with other reading instruction to create a comprehensive reading program.

(NRP, 2000)

## What Are the Different Approaches to Phonics Instruction?

Approach	Definition	Example
<b>Synthetic phonics</b>	Children learn how to: •convert letters or letter combinations into sounds •blend the sounds together to form words	Teacher points to letter and says the letter name and sound, for example, "m" says /m/, a says /a/, and t says /t/. Students blend the sounds together to say "mat."
<b>Analytic phonics</b>	Children: •learn to analyze letter-sound relationships in previously learned words •do not pronounce sounds in isolation	Teacher points to the word "mat" and says, "This word starts with the same letter as man and ends like the word cat. Put the parts together and tell me the word." Children: "mat."
<b>Analogy-based</b>	Children learn to: •use parts of word families they know to identify words they don't know that have similar parts	Teacher: "We know that at says /at/ and that m says /m/. Let's put them together to make a new word." Children: "mat."
<b>Phonics through spelling</b>	Children learn to: •segment words into phonemes •make words by writing letters for phonemes	Teacher: "Write down the sounds in the word mat." Children segment the word into sounds and write the sounds as a word. Teacher: "Read me the word." Children: "mat."
<b>Embedded phonics</b>	Children are: •taught letter-sound relationships during the reading of connected text	Not systematic or explicit since children encounter different letter-sound relationships as they read.
<b>Onset-rime phonics</b>	Children learn to: •identify the sound of the letter or letters before the first vowel (the onset) in a one-syllable word and the sound of the remaining part of the word (the rime)	Teacher: "Find the vowel in the word (mat) on your paper and point to the letter that comes before it." Children find the "a" then point to the m. Teacher: "What sound does it make?" Children: /m/. Teacher: "What is the sound of the rest of the word?" Children: /at/. Teacher: "What word is it?" Children: "mat."

(Armbruster, Lehr, & Osborn, 2001)

## What Are Components of “Sound” Instruction?

- Programs of phonics instruction are a means to an end with the end being comprehension.
- Children need to be taught major consonant and vowel letter-sound relationships.
- Children need ample reading and writing activities that provide practice containing words using the specific letter-sound relationships they are learning.
- Phonics instruction helps children learn to identify words and increases their ability to read.
- An important component of learning letter-sound relationships is learning the forms of letters and other symbols. Children need to recognize forms and symbols automatically, without conscious effort, to be able to recognize words fluently.
- Research identifies knowledge of letter names as one of the best predictors of success in reading.
- Letters and symbols need to be displayed where children can see them; where children can refer to them as they read, write, work, and play; and where children can manipulate them.

(Adams, 1990; Neuman, Copple, & Bredekamp, 2000; Snow, C., Burns, M.S., & Griffin, P., 2001)



# How Does the Phonics Instruction in My Reading Program Align with Research?

Think, Ink, Pair, Share

## SYSTEMATIC

Y N

- ☐ ☐ Is there a systematic order of introduction of letter-sound relationships?
- ☐ ☐ Does this order facilitate early decoding of words?

## EXPLICIT

- ☐ ☐ Does the program give precise directions for teaching letter-sound relationships?

## LETTER-SOUND INFORMATION

- ☐ ☐ Is phonics applied daily in students' reading and writing?

## INTEGRATION

- ☐ ☐ Are phonemic awareness and letter knowledge activities included?
- ☐ ☐ Are there materials that allow students to practice decoding and writing?
- ☐ ☐ Is literature used to develop a sense of story, vocabulary, and comprehension?

# What Are the Challenges for Teachers?

The challenges are for teachers to



- Understand, choose, model, and use varied teaching and learning strategies that emphasize transfer
- Design lessons requiring active participation
- Motivate students with energy, support, and positive reinforcement

# Checking for Understanding

## Partner Review

### What Have You Learned So Far?

1. Review your notes.



2. Partner 1 reviews new learning for 90 seconds.

3. Partner 2 for 45 seconds.

4. Partner 1 again for 30 seconds.

5. Partner 2 finishes by reviewing for 15 seconds.

6. Write any remaining questions.

**Remember:** You cannot repeat what your partner shares.

## SECTION 4: ENGAGEMENT AND PRACTICE

- Classroom Strategies and Applications
- Jigsaw Teaching
- Assessment
- Video Modeling
- Action Planning

## How Can We Focus on Phonics?

- Use language play, a variety of texts, and/or physical activities to introduce children to the similarities and differences in the letter-sound relationships of words to show that language has meaning, message, and form
  - nursery rhymes
  - alliteration
  - poetry
  - tongue twisters
  - patterned books
  - singing
  - dancing
  - fingerplay
  - alphabet/word games
- Use clapping, tapping, marching, naming, and/or counting games to help children discover that some words can be divided into syllables, and words may also be divided into sounds (phonemes) that are represented by symbols or letters (graphemes)

## Activities for Developing Phonics

### Decoding

Blending

Onset and Rime

Multi-sensory Practice

### Encoding

Segmenting

Individual Response Card Segmenting

Dictation

## Activities for Developing Phonics

### Decoding

#### Application #1: Group Word Blending

The purpose of group word blending is to have students see, hear, and say the letter sounds and blend them together into words. This should be a daily routine. First, with teacher modeling; second, as a group response along with the teacher; and third, independently. To assist students with understanding the blended words, students should be asked to use the words in sentences; thus increasing the opportunity to make meaningful connections between letters and words.

#### **Procedure:**

1. Write the first letter on the board, **m**, saying the sound as you write it **/m/**. Write the vowel letter next to it, **a**, saying its sound as you write it **/a/**. Then write the next letter on the board, **p**, saying its sound as you write it **/p/**.
2. Tell students they need to listen as you blend the sounds together to form a word. Touch under the first letter, saying the sound **/m/**. Slowly and smoothly move your hand from left to right beneath each letter, saying the sounds continuously, moving from **/m/** to **/a/** to **/p/**.

## Application #1: Group Word Blending (continued)

3. Have students join you in saying the sounds as you move your hand under the letters. Teacher modeling is key to this procedure.
4. Listen to be sure students are saying the correct sounds for each letter.
5. Have students say the word.
6. To help make a meaning connection between the letters, sounds, and the word, have students tell a sentence with the word.
7. Continue this procedure for each word.

### Variations:

Follow the same procedure to introduce or review individual letter sounds. Writing **oi** on the board and then saying **/oi/**. Be sure however that the individual letter practice is immediately followed by word blending with the introduced letter(s) e.g., **oil**, **boil**, **toil**.



## Decoding

### Application #2: Word Sorts and Word Hunts

**Long Vowels:** Word sorts are excellent activities to emphasize phonics generalizations while highlighting the importance of categorizing and discovery in the study of words.

**Materials:** Select about 20 short /a/ and long /a/ words that are spelled with the CVVC (consonant-vowel-vowel-consonant) pattern (**rain**, **pail**) and the CVCV (consonant-vowel-consonant-vowel) pattern (**cake**, **tape**). These words should be in your students' reading ability. You may also include one or two words that do not fit either expected sound or pattern (was, say). Prepare word cards or write the words randomly on a word study handout template for students to cut apart for independent sorting.

### **Sample Lesson of Word Sort:**

1. Introduce the sort by reading the words together and talking about any whose meaning may be unclear. Invite students to make observations about the words: "What patterns do you notice?"
2. Sort the words first by the sound of the vowel in the middle.
3. After discussing the rationale for the sort, ask students to look for patterns in the long /a/ column and separate them into two categories.
4. Again talk about how the words in each column are alike.

## Application #2: Word Sorts and Word Hunts (continued)

5. Scramble the words and re-sort a second time under designated headers or key words. The categories will look something like the following sort.

Short /a/		Long /a/		Oddballs
cap	fast	cape	chain	march
gas		came	rain	was
back		name	pail	
fan		lake	pain	
has		gate	paint	

6. Ask students to sort independently.
7. Store words for more sorting and activities on subsequent days.

**Variation:** Study sounds and patterns for e, i, o, and u in the same manner.

## Application #2: Word Sorts and Word Hunts (continued)

### Sample Lesson for Word Hunt

Word hunts are excellent seat work activities. Students can work independently or with a partner. They enjoy going back into familiar texts to look for words that fit a particular pattern. Word hunts will usually turn up many miscellaneous words or oddballs, and interesting discussion can arise as students work together to decide how certain words should be categorized.

1. Ask students to go through text(s) that they have recently read to find words that fit a particular sound pattern: "Find all the words you can that sound like /cake/ in the middle."
2. Words that fit the desired patterns are written down in notebooks.
3. Students meet together in small groups and read their words aloud. The children or the teacher may record the words on chart paper for display.
4. Students are asked what words could be grouped together.
5. Students check to see what words they can add to their word study notebooks.

## **Application #2: Word Sorts and Word Hunts (continued)**

### **Sample Lesson for Word Hunt**

#### **Variations:**

1. Students hunt for sight words, similar vowel patterns, compound words, or words to which inflected endings or plural forms may be added.
2. Use newspapers or magazines for the hunt. Teams are sent in search of various long vowel patterns (an *ai* team, an *ay* team, a *CVE* team, etc.) Words fitting the desired patterns are circled or highlighted, written down, and shared in small-group instruction.

(Bear, Invernizzi, Templeton, & Johnston, 2000)

## Application # 3: Onset and Rime

Syllables divide into two primary parts: onsets and rimes (*rimes* are related to, but distinct from *rhymes*.) The rime is the part of the syllable that consists of the vowel and any consonant sounds that come after it. The onset consists of any consonant sounds that precede the vowel (e.g., in the word “stand,” the onset is **st-** and the rime is **-and**).

Instruction with onsets and rimes helps readers acquire word recognition skills as well as develop vowel generalizations. Nearly 500 primary words may be derived from a set of only 37 rimes:

-ack	-ail	-ain	-ake	-ale	-ame
-an	-ank	-ap	-ash	-at	-ate
-aw	-ay	-eat	-ell	-est	-ice
-ick	-ide	-ight	-ill	-in	-ine
-ing	-ink	-ip	-ir	-ock	-oke
-op	-ore	-or	-uck	-up	-ump
-unk					

(Adams, 1996)

Practice may include substituting either onsets or rimes to make new words. (Making nonsense words is acceptable if the purpose of the lesson is decoding).

## Application # 3: Onset and Rime (continued)

### Building Houses

Write a word on the chalkboard and draw a rectangle around it. Explain to the students that this is the first “brick” of the house. Draw another brick and ask students to tell you a word that would have the same rime, but a different onset (e.g., if the first brick is “big,” the next brick could be “fig”). As the house building continues, ask students to come to the board and write words. Students could also be “building houses” on their own papers as the house is being built on the chalkboard. Variation: build other kinds of houses such as igloos, forts, cabins.

## Application #3: Onset and Rime (continued)

### Basket of Eggs

In this activity, students combine two halves of colored, plastic eggs - one half of the egg has an onset written on it and the other has a rime. (Choose word parts that will result in high-utility words for your students.) Separate the halves, put them in a basket, and scramble them. Students can practice decoding words by combining different egg halves.

If you do not want to buy plastic eggs, you can do the same practice activity by cutting eggs of colored tagboard, cutting the eggs in half, and writing the onsets and rimes. Egg parts may be combined in the same way as the plastic eggs.

As they complete eggs have students put the eggs word-side-out in a real egg carton.

## **Application #3: Onset and Rime (continued)**

### **Rime Flip Books**

Make a separate flip book for each rime. The many onsets that match the rime are stapled in a pile on the left. The rime is on a long paper at the bottom.

### **Large Flip Book Variation**

Flip books have two sides, with the onsets on the left and the rimes on the right. The book will have binding on both the left side and the right side with a backing of stiff cardboard and pages made of half-sheets. Students make new words by flipping to an onset on the left, and combining it with any of the rimes on the right. Students may be directed to choose one onset and combining it with all the rimes, reading all the onsets with one of the rimes, or randomly combining an onset and rime of their choosing.

**Note:** Some combinations of onset and rime will create nonsense words, but those words can still be decoded.



## Application #4: Word Wall

A Word Wall is a strategy particularly effective in teaching high frequency words. It is a simple, uncluttered, visual display of words. The teacher selects 4 to 5 words each week from the reading lesson and adds them to a wall or bulletin board in the room. Student participation in the selection of the words is also encouraged for collaborative building of the wall. Sometimes the words have a sound or letter highlighting clue and sometimes they are displayed plain.

Select words that appear in students' reading and writing material and that are often confused with other words. Difficult spelling patterns can also be criteria for the selection.

The Word Wall grows as the year progresses. The words are written with a thick, black ink, permanent marker on different colored construction paper. Words are placed on the wall alphabetically by first letter, and the first words displayed are very different from one another.

The key to a successful Word Wall is to make it interactive. Model the use of it. Help students to make connections between the wall and their reading, spelling, and writing.

Remove words that become automatic.

(Cunningham, 1995; Fountas & Pinnell, 1998; Indiana State Department of Education)

## Decoding – Blending

The motivational value of:

- associating letters with interesting characters,
  - hand motions, and
  - incorporating this into activities and games that are fun
- is important for promoting young children's learning.

(National Reading Panel, 2000)

### Multi-Sensory Practice

Blending sounds into words is a process that involves the eyes, ears, mouth, and occasionally, the fingers.

When decoding (blending) the sounds into a word, students benefit from simultaneously seeing, hearing, and saying the sounds. Students should say (and hear) the sounds as they look at the letters and blend them into words.

Some students may benefit from using fingers to point to and focus upon the letters in the words. As students slide their fingers under the words, they feel the left-to-right movement and the connectedness of the letters and sounds.

### Multi-Sensory Practice (continued)

Some students like to point with the “pointer finger” of one hand. Other students find success using the pointer fingers of both hands moving together. The eraser end of a pencil also makes a good “pointer.”

If a student prefers a “marker,” it helps to use one that is transparent. If you use a transparent marker (such as a slice of clear plastic or overhead transparency), the student will still be able to make a “return sweep” and keep reading even if he/she forgets to move the marker down right away.

Pointing and using markers are temporary ways for students to focus their eyes on the letters and words being studied. As they become more proficient, students will use markers and pointing on fewer occasions.

**Note:** If many students are practicing decoding at the same time, they should be encouraged to vocalize the sounds with a quiet voice. If a student is very distracted by the sound of several students using their voices at the same time, a pair of headphones (not connected to anything) can block out much of the noise and still allow the student to hear him/herself.

## Useful Phonics Generalizations

1. **The c rule.** When *c* comes just before *a*, *o*, or *u*, it usually has the *hard* sound heard in *cat*, *cot*, and *cut*. Otherwise, it usually has the *soft* sound heard in *cent*, *city*, and *bicycle*.
2. **The g rule.** When *g* comes at the end of words or just before *a*, *o*, or *u*, it usually has the *hard* sound heard in *tag*, *game*, *go*, and *gush*. Otherwise, it usually has the *soft* sound heard in *gem*, *giant*, and *gym*.
3. **The VC pattern.** This pattern is seen in words such as *an*, *can*, *candy*, and *dinner*. As a verbal generalization it might be stated as follows: In either a word or syllable, a single vowel letter followed by a consonant letter, digraph, or blend usually represents a short vowel sound. (Note that *C* stands for either a consonant letter, consonant digraph, or consonant blend, e.g., *bat*, *bath*, *bask*.)
4. **The VV pattern.** This pattern is seen in words such as *eat*, *beater*, *peach*, *see*, *bait*, *float*, and *play*. As a verbal generalization, it might be stated like this: In a word or syllable containing a vowel digraph, the first letter in the digraph usually represents the long vowel sound and the second letter is usually silent. According to Clymer (1963, 1996), this generalization is quite reliable for *ee*, *oa*, and *ay* (e.g., *fee*, *coat*, *tray*) and works about two-thirds of the time for *ea* and *ai* (e.g., *seat*, *bait*), but is not reliable for other vowel digraphs such as *ei*, *ie*, or *oo*; or diphthongs, *oi*, *oy*, *ou*, and *ow*.

## Useful Phonics Generalizations (continued)

5. **The VCE (final e) pattern.** This pattern is seen in words such as *ice, nice, ate, plate, paste, flute, vote, and clothe*. As a generalization, it might be stated this way: In one-syllable words containing two vowel letters, one of which is a final *e*, the first vowel letter usually represents a long vowel sound, and the *e* is silent. If the vowel is not long, try the short sound.
6. **The CV pattern.** This pattern is seen in one-syllable words such as *he, she, go, my, and cry*. As a generalization, it might be stated this way: When there is only one vowel letter in a word or syllable and it comes at the end of the word or syllable, it usually represents the long vowel sound.
7. **The r rule.** This rule applies to words like *far, fare, fair, girl, fur, her, and here*. As a generalization, it might be stated as follows: The letter *r* usually modifies the short or long sound of the preceding vowel letter.
8. **The VCCV, VCV, and the Cle patterns are three syllabication rules worth knowing.** For the VCCV pattern, the rule is to divide between the two consonants. This pattern is represented in words such as *blanket* and *happy*. For the VCV pattern, the rule is to divide before or after the consonant. Words representing this pattern are *robot, robin, divide, and before*. For the last pattern, *Cle*, the rule is to divide before the *cle*. Words representing this pattern are *uncle, table, and example*.

(Gipe, 1998, p. 406)

## Encoding – Segmenting

### Encoding Application #1: Segmenting with Dry Erase Boards and Magnetic Letter Boards (sometimes called Dictation)

#### Dry Erase Board Practice

As a substitute for paper in spelling/encoding practice, dry erase boards provide a fun and useful alternative. The boards can be viewed easily by the teacher when held up for checking, provide an element of novelty, and are easy to erase. (Note: Be sure to use low-odor pens.)

#### Instruction:

**Teacher:** “The word is “**stamp**.” I need to put a stamp on this letter. “**stamp**”

**Students:** “**stamp**” /s/ /t/ /a/ /m/ /p/ “**stamp**”

The students proceed to write on their dry-erase boards, voicing the sounds as they print the letters. Teachers walk among the students as they work, and after a reasonable length of time, students are asked to hold up their boards. The teacher can tell at a glance who might need more support.

(Note: Clean, discarded socks make good erasers.)

## Encoding - Segmenting (continued)

### Magnetic Letter Boards

Magnetic letter boards are another way to practice spelling/encoding. Students follow the same procedure described above, but instead of writing with a dry-erase pen, they are moving magnetic letter tiles. Students voice the sounds as they are placing the magnetic letters, and blend all the sounds together once the word is complete.

Beginning spellers should not have the whole alphabet in front of them. Since the teacher will already know which words will be practiced, the magnetic letters can be limited to the ones that will be needed for the phonics practice of the day.

If your school cannot afford magnetic letter boards, letter anagrams printed on heavy paper or cardstock may be substituted.

## Application #2: Individual Response Card Segmenting

The purpose of individual response card segmenting is to have children listen to sounds and/or words and identify the corresponding letters. Students receive a multi-sensory approach by hearing, seeing, touching, and saying.

### Procedure:

1. The teacher has a planned list of sounds, position identification (beginning, medial, and final), and words to be used for the lesson.
2. Students receive individual cards with letters, and/or sound spellings (oi, ow, th) on them to place face up on their desks. It is important that students only receive the letter cards needed for the segmenting activity for the day. Too many letters can be confusing and distracting to students.
3. The teacher says, "Today we will be listening to words and sounds and matching letter spellings."
4. First we'll listen for the vowel sound in the middle of the word. The teacher says the word man and has the children repeat it /man/.
5. The teacher then asks students to **hear it** and identify the middle vowel sound in the word. (This step requires students to segment the word, in order to identify the middle sound.)



## Application #2: Individual Response Card Segmenting (continued)

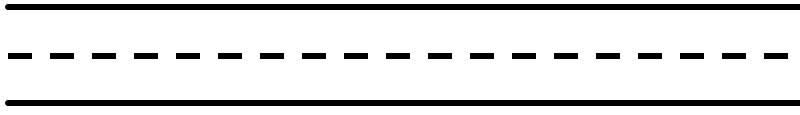
6. Next, they are instructed to find the letter that makes that sound on their desk (**see it**).
7. Lastly, they are asked to **touch it** (the response card) on their desk and raise it for the teacher to see it. While children respond with the card they are also instructed to **say it** (the sound /a/).
8. The teacher visually checks for student understanding and listens to be sure the correct sound is being made.
9. As students become trained with the above procedures, the teacher will only need to identify the part of the word children need to identify and then say: **hear**, **see**, **touch**, **say**, to prompt students' responses.

## Individual Response Cards

a	b	c	d
e	f	g	h
i	j	k	l
m	n	o	p
q	r	s	t
u	v	w	x
y	z		

## Dictation is:

- The writing activity that links kinesthetic learning with the visual and auditory learning of letters, sounds, and decoding.
- Used in kindergarten, first grade, and for others reading at those levels no matter what age.
- Interactive and filled with guidance, coaching, cues, and other forms of feedback (not like old-fashioned spelling).
- Sometimes needed daily by certain students and groups.
- A way to informally assess which sounds, decodable words, and sight words are not yet firm and need to be practiced.
- Another way to provide additional practice in manipulating letters and sounds.
- A way to increase automaticity.
- Definitely a reading activity.



1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_  
-----  
\_\_\_\_\_

4 \_\_\_\_\_ 5 \_\_\_\_\_ 6 \_\_\_\_\_  
-----  
\_\_\_\_\_

7 \_\_\_\_\_ 8 \_\_\_\_\_  
-----  
\_\_\_\_\_

9 \_\_\_\_\_ 10 \_\_\_\_\_  
-----  
\_\_\_\_\_

11 \_\_\_\_\_  
-----  
\_\_\_\_\_

12 \_\_\_\_\_  
-----  
\_\_\_\_\_

## Spelling Rules

Very few spelling rules, or generalizations, are effective in teaching spelling. For a rule to be valid, it must apply to a large number of words and have few exceptions. Following are rules that meet these criteria.

### Suffixes

**Double the Final Consonant** - Double the final consonant of a word that ends with a single vowel and consonant before adding a suffix that begins with a vowel (*get/getting*).

Double the final consonant of a word that is accented on the final syllable and ends with a single vowel and consonant before adding a suffix that begins with a vowel (*permit/permitted*).

### Words Ending in Silent e

Drop the final silent *e* before adding a suffix that begins with a vowel (*have/having*).

Keep the final silent *e* when adding a suffix that begins with a consonant (*late/late*).

### Words Ending in y

Change the *y* to *i* when adding a suffix to words that end in consonant -*y* (*try/tried*), unless the suffix begins with *i* (*try/trying*).

## Spelling Rules (continued)

Do not change the *y* to *i* when adding a suffix to words that end in vowel *-y* (*play/played*).

### Plurals

Add *s* to most nouns to form plurals (*friend/friends*).

Add *es* to nouns that end with *s*, *ss*, *sh*, *ch*, or *x* (*box/boxes*, *class/classes*).

Change the *y* to *i* and add *es* to nouns that end in consonant *-y* (*country/countries*).

Add *s* to nouns that end in a vowel *-y* (*key/keys*).

Change the *f* or *fe* to *v* and add *es* to some nouns that end in *f* or *fe* (*half/halves*, *knife/knives*).

Some nouns change their spellings to form the plural (*foot/feet*).

Some nouns are spelled the same for both singular and plural (*sheep*).

(Sitton, 1995, p.85)

## Irregular Words

### Sight Word Practice

For the purpose of this discussion, “sight words” will be defined as those words that cannot be decoded using phonics rules and letter sound relationships; they must be read “on sight” and committed to memory.

#### Helpful Suggestions

- Choose words from the text the students will be actually reading. Follow the introduction of these words by daily cumulative review.
- Limit the number of sight words introduced in a week to those actually appearing in the texts students will read (e.g., Kdg. 2-3 words; Gr. 2, 5-7 words).
- Teach highly similar words (e.g., was/saw, thought/through) in separate lessons.
- When introducing a new sight word, have the students **print** the word on paper or a dry-erase board. Even older readers should print rather than use cursive, because printing more closely matches the words as they appear in books and other printed text. Having students print, allows them to make a better orthographic imprint for themselves, which in turn increases the probability of remembering the word.

## Irregular Words -- Sight Word Practice (continued)

- Use another sense; have the students whisper or sub-vocalize the letter names as they print the letters in the word. After printing the words, the students should always pronounce the word (e.g., "t" "h" "e" "i" "r" "their").
- Put sight words on flash cards for students. As a sight word is introduced, the student receives a card with the new word printed on it. Every day (or every few days), the student reads his/her sight word card collection to the teacher or volunteer. If the student reads a word "on sight" (with no help), a little star is made on the card. The sight word card collection grows as new words are introduced, and the same words (shuffled each time) are used for practice. Once the student has received seven little stars (which means on seven separate days, the student knew the word "on sight"), that card may go home and is no longer part of the student's card collection at school.
- Sight words should be posted for easy access on the word wall. Students need to be able to refer to the correct spelling of sight words rather than having to guess when they are writing.

### As review:

- Dictate hard to remember sight words until they are firm.



## PHONICS

### TIPS FOR ADDITIONAL CLASSROOM PRACTICE

1. Use environmental print/logos (e.g., puzzles made out of cereal boxes, pictures/logos of places familiar to children, snack table labeled with pictures of snacks).
2. Label the classroom.
3. Make an alphabet wall with children's names and environmental print. Use this chart as a reference point when talking about letters and sounds (Pinnell & Fountas, 1998).
4. Play name games.
5. Construct an alphabet station (e.g., alphabet puzzles, magnetic letters, sandpaper letters, alphabet games, stencils, flashcards, and alphabet charts of different sizes). Invite children to write, trace, copy, and experiment with letters/words. Have individual-sized chalkboards, dry-erase boards, clay trays, tracing paper, and painting easels.
6. Associate letters with their sounds and use pictures or concrete representations that include the letter (e.g., the letter *f* drawn as the stem of a flower).

## ADDITIONAL TEACHING APPLICATIONS

(continued)

7. Students read/write aloud (e.g., big books, alphabet books, nonfiction, nursery rhymes, poetry, shared reading, guided reading, whisper reading, partner reading, independent reading) with decodable text that has only previously taught sounds and previous taught sight words.
8. Make personal books (e.g., alphabet books -- Collect items that start with the same letter/sound relationship being taught and glue them on pages of a book.
9. Use songs, poetry, raps, chants, tongue twisters, and/or rhythmic responses to play with the sounds of language (See Helpful Resources in Section 7).
10. Go on a letter, phonogram or pattern scavenger hunt around the classroom, the school, or through books and old magazines when that letter/sound relationship is taught.
11. Play "I Spy." Become Letter/Word Detectives.

## ADDITIONAL TEACHING APPLICATIONS

(continued)

12. Use hands-on, sensory activities when each letter/sound relationship is taught (i.e., visual, auditory, kinesthetic, and tactile.) Eat alphabet soup, animal crackers, and cereal with that letter/sound. Sort the letters and animals into categories. Use puppets to model, teach, and practice “sounding out” strategies. Get small hand mirrors for each child. Have children put their hands to their faces (e.g., chins, mouths, etc.,) and look in the mirror so that they can see and “feel” their production of sounds. Use VAKT (visual, auditory, kinesthetic and tactile) activities.
13. Create and play learning games (e.g., Bingo with decodable words or taught sight words, word sorts, sort by rimes, sort by initial consonant, sort by long/short vowel).
14. Construct sliding masks to highlight and blend words and word parts. Construct “flags” to highlight words by taking them out of context and then putting them back into context (as suggested by Don Holdaway; See Routman, 1994, pp. 190b-191b for instructions).
15. Construct and use strategy posters and/or bookmarks.
16. Plan writing activities for developing connections and knowledge of the concepts of print and for applying learned letter/sound relationships in writing tasks (e.g., composing, tracing, copying, printing).

# JIGSAW TEACHING

Jigsaw Teaching: Small Group Practice

Decoding	Encoding

# ASSESSMENT

## Ongoing Assessment of Phonics

- Observation of oral reading and anecdotal records
- Listen to individual student's reading
- Checklists
- Informal Reading Inventories, Running Records, Miscue Analysis
- Fluency checks on letter/sound automaticity and previously taught sight words
- Dictation and writing samples
- Assess students frequently on previously taught sounds, decodable words using those sounds, decodable text, and taught sight words.
- Track students' growth over the year in sound/letter relationships, decoding text, and sight words.

## Word Attack Assessment

Name	Grade
Administered by	Date

Skill	Student's Score	Possible Score	Pass *	No Pass **
Letter Names		52	(47-52)	(0-46)
Sounds		52	(47-52)	(0-46)
Consonant Blends		10	(9-10)	(0-8)
Consonant Digraphs		4	(3-4)	(0-2)
Short Vowel (c-v-c)		5	(4-5)	(0-3)
Multisyllabic Words		5	(4-5)	(0-3)
Long Vowel/silent e		5	(4-5)	(0-3)
Vowel Digraphs		4	(3-4)	(0-2)
Grammatical Endings/Affixes		10	(9-10)	(0-8)

\* Pass: The student basically has the skill. Review/reteach the few missed items.

\*\* No Pass: The student still needs work on this skill.

### 1. Letter Names \_\_\_\_/52

x	A	O	g	m	a	H	S	L	p	D	K	r
c	e	U	I	f	y	t	E	j	W	R	X	k
d	n	C	J	i	v	b	T	Q	l	w	o	F
Y	z	B	N	G	P	h	s	M	V	q	u	Z

### 2. Sounds \_\_\_\_/52

x	A	O	g	m	a	H	S	L	p	D	K	r
c	e	U	I	f	y	t	E	j	W	R	X	k
d	n	C	J	i	v	b	T	Q	l	w	o	F
Y	z	B	N	G	P	h	s	M	V	q	u	Z



## Word Attack Assessment (page 2)

3. Consonant Blends _____/10									
sm	br	sn	sk	fr	sl	cr	st	pr	str
4. Digraphs _____/4									
th	sh	ch	wh						
5. Short Vowels in CVC Words _____/5									
sab	nif	fet	lud	moz					
6. Multisyllabic Words with Short Vowels _____/5									
wifsum	lembot	valtif	pontuk	migfatsut					
7. Long Vowel with Silent "e" _____/5									
mafe	ruke	pefe	nibe	wote					
8. Vowel Digraphs _____/4									
foat	leet	tain	peaf						
9. Grammatical Endings and Affixes _____/10									
wod's	fozzing	lanner	biffs	vassed					
unlop	ropful	pogness	disvondil	intazz					

Notes:

(Rauth, 2002)

## Word Attack Assessment (Student Protocol)

1.

x	A	O	g	m	a
H	S	L	p	D	K
r	c	e	U	I	f
y	t	E	j	W	R
X	k	d	n	C	J
i	v	b	T	Q	I
w	o	F	Y	z	B
N	G	P	h	s	M
V	q	u	Z		

Letter Names

## Word Attack Assessment (Student Protocol)

2.

S	t	m	G	B	v
a	d	F	J	Z	L
e	w	O	c	u	H
r	k	p	N	Q	i
y	X	M	T	s	b
V	g	D	f	j	A
z	l	E	W	o	C
R	U	h	P	K	n
q	I	x	y		

Sounds

## Word Attack Assessment (Student Protocol)

3.	sm	br	sn	sk	fr
	sl	cr	st	pr	str
4.	th	sh	ch	wh	
5.	sab	nif	fet	lud	moz
6.	wifsum		lembot	valtif	
		pontuk	migfatsut		
7.	mafe	ruke	pefe	nibe	wote
8.	foat	leet	tain	peaf	
9.	wod's	fozzing	lanner	biffs	vassed
	unlop	ropful	pogness	disvondil	intazz

# VIDEO MODELING

## Contexts for Video Viewing

### Video Viewing

**Context #1:** Kessler Elementary School, Longview School District

**Focus:** 1<sup>st</sup> Grade Phonics training in identifying medial vowel sounds (long and short) with a small group of students.

**Context #2:** Anita Archer Demonstration Lessons

**Focus:** 1<sup>st</sup> Grade - Combined Phonemic Awareness & Phonics and Passage Reading.

3<sup>rd</sup> Grade - Struggling Students use of Phonics, Passage Reading and Vocabulary

Select clip(s) of the videos for participants to observe.

## Video Modeling Observation Chart

<p>What phonics skill was the teacher teaching?</p>	<p>What classroom management strategies did the teacher use to support instruction?</p>
<p>How did the teacher assess, engage, or reinforce student success?</p>	<p>What else did you observe (e.g., other literacy enrichment, physical environment, and/or accommodations)?</p>

## **ACTION PLANNING**



## Action Planning: How Can I Put My New Learnings into Practice?

1. **Review:** Look over the notes you made during the Think-Ink-Pair-Share activities completed at the beginning of this session.
2. **Revise:** What additions or revisions can you make to your notes?
3. **Plan:** What are my next steps to purposefully incorporate phonics into your lesson plans tomorrow?

How will those plans meet the instructional needs of your students?

Using the forms on the next two pages, **construct an action plan** that will help you address the instructional needs of your students.

# Constructing an Action Plan to Meet the Instructional Needs of Students

What plans can I try tomorrow?	How will the plans address the instructional needs of my students?

**Phonics Plans for (date)\_\_\_\_\_ and (time)\_\_\_\_\_**

**Purpose of Lesson (circle one):**

New Sound Introduction

Practice

Assessment

**What sound/spelling relationships(s) will be the focus of the lesson?**

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**What explicit and systematic instruction techniques will I use?**

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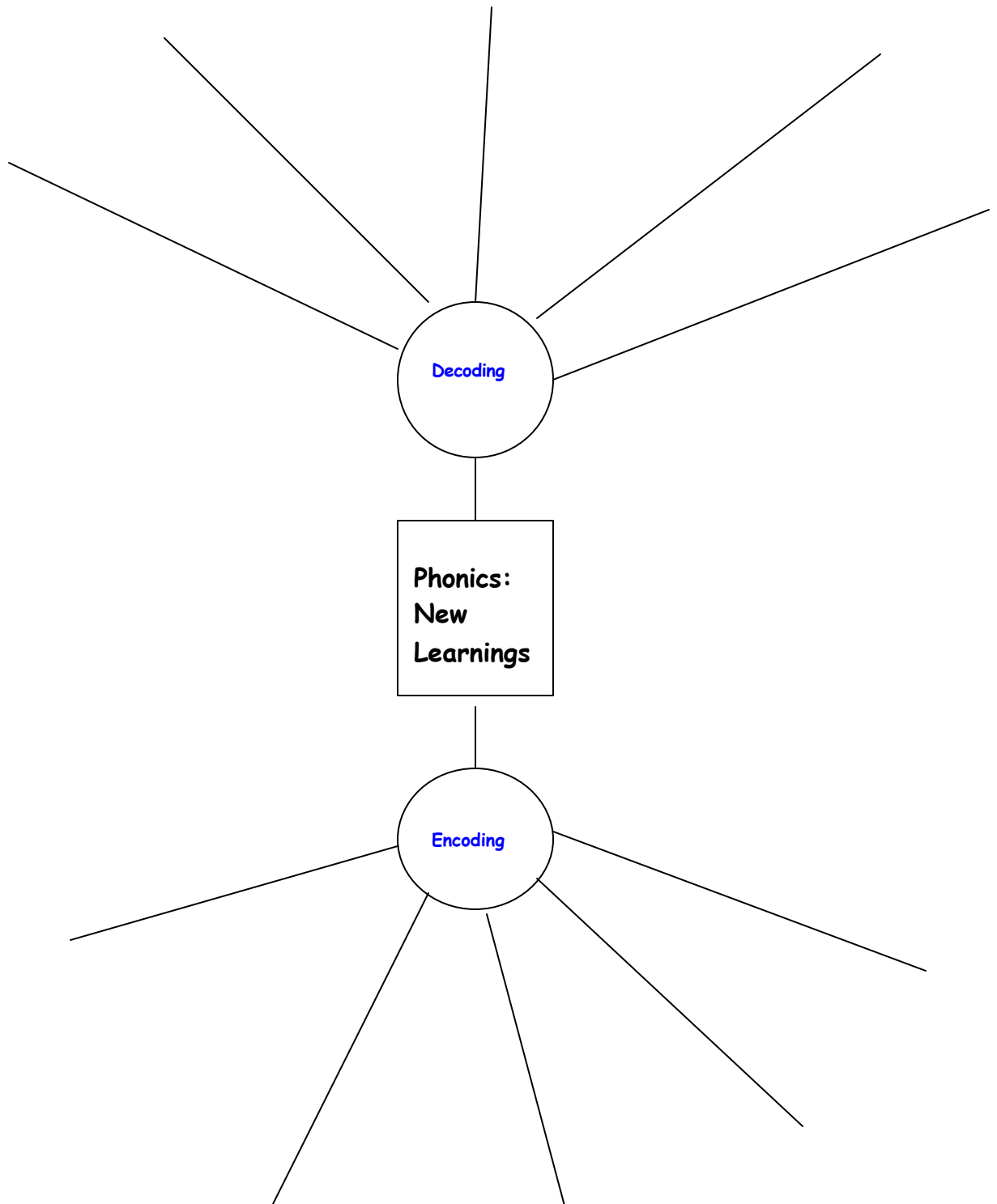
**How will I know if the lesson was successful?**

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## SECTION 5: SUMMARIZING KEY LEARNINGS



## Evaluation and Feedback

1. What did you find most useful about this session?
2. What did you find least useful?
3. What additional information, materials, or resources would be useful?

## APPENDIX B: SHORT MATRIX

Structure of Language	Learner Processes	Teaching Methods	Assessment	Motivation	Linkage to Other Reader Acquisitions
<ul style="list-style-type: none"> <li>Letters – shapes, names, and sounds (capitals and lowercase letters)</li> </ul>	<ul style="list-style-type: none"> <li>Learner's letter knowledge is one of the best predictors of how well the learner will learn to read</li> <li>Learning names aids learning the sounds</li> <li>Association between letters and sounds and letters and mouth movements, which are tangible and can be felt</li> <li>Key terms need to be taught</li> <li>Students with LD/RD need more practice to learn letters</li> <li>ELL may lack needed vocabulary for mnemonics</li> </ul>	<ul style="list-style-type: none"> <li>Structured programs that teach letter forms, writing posture, and pencil grips</li> <li>Mnemonic devices that help student learn to link letter shapes and sounds</li> <li>Multisensory approaches</li> <li>Systematic instruction with a definite scope and sequence, with a major emphasis on vowels</li> <li>Instruction must be directed at establishing letter knowledge in memory</li> </ul>	<ul style="list-style-type: none"> <li>Letter knowledge can be assessed by tasks that require students to write or point to letters that correspond to names or sounds</li> <li>Students can say the sounds of letters presented on cards</li> <li>Students can select letter tiles or plastic letters to spell sounds in dictated words</li> </ul>	<ul style="list-style-type: none"> <li>Alphabet books</li> <li>Songs</li> <li>Characters that look like letters with names that contain the letters' sounds</li> <li>Use of mirrors to explore mouth movements</li> <li>Games</li> <li>Television programs designed to teach letter knowledge to young children</li> </ul>	<ul style="list-style-type: none"> <li>Mastery of letters is a prerequisite for making progress in learning to read independently</li> <li>Knowledge of shapes, names, and sounds aid the automatic recognition of shapes, so the shapes can be reproduced from memory in writing</li> <li>Letter names are needed to identify and distinguish letters in novel words, so they can be remembered by sight and can be spelled correctly</li> </ul>

Volume II, Part 2: Phonics

## APPENDIX B: LONG MATRIX

### 1. STRUCTURE OF LANGUAGE

The task of learning the shapes of letters is not easy. There are 26 capital (uppercase) and 26 lower case letters in English. The features of capital letters are more distinctive and hence easier to discriminate than the features of lower case letters. Several letters have shapes that are similar to other letters as well as to numbers: b and d; f and t; g and 8; h, n, and r; i and j; l (lower-case “el”), capital I, and the number 1; p and q; s, z, 2 and 5; u, v, and y; E and 3; m and w. These similarities are the basis for confusions.

Letters have names ordered from A to Z. Most letter names contain sounds that are symbolized by those letters in words, for example, b named “bee” containing /b/. The only letters that do not contain their primary consonant sounds in their names are h, w, and y.

Although letter names provide a basis for learning many letter-sound correspondences, there are other major correspondences that are not present in letter names: c for /k/; g for /g/ as in go; letters representing short vowels; vowel and consonant digraphs, such as sh, th, ai, oi (as in oil), and ou (as in out). The letter-sound relations in English are variable with the same letters representing more than one sound, particularly in the case of vowels. Regularities of the writing system occur at higher word-based levels as well.

### 2. LEARNER PROCESSES

Letter knowledge is one of the best predictors of how well students will learn to read when formal instruction begins. Several acquisitions are involved including learning the names of letters, learning to write letters, saying the alphabet in order, and learning major grapheme-phoneme correspondences. These acquisitions require much practice to retain this information in memory so that letter knowledge is activated automatically during reading and writing tasks

If children learn the names of letters before they learn their sounds, they will use the names to learn the sounds. Also they will extract sounds from letter names when they read and write. For many letters, this serves them well because the names contain the appropriate sounds. However, for a few letters, the names cause confusion, for example, the name of y (“wie”) beginning with /w/, and the name of w beginning with /d/. This results in spellings such as wife spelled yf.

Learning grapheme-phoneme relations involves forming associations not only between letters and sounds but also between letters and the mouth movements involved in producing those sounds. Whereas sounds are ephemeral and disappear as soon as spoken, mouth movements are tangible and available for the learner to feel and inspect. According to the motor theory of speech perception, articulatory gestures are at the core of phonemes.

In addition, students need to be taught the language of alphabetic instruction, that is, the vocabulary and meanings of terms such as capital and lower case letters, consonants, vowels, sounds, and symbols. If the systematic phonics program uses terms such as short vowels and long vowels, then these need to be taught as well.

### **3. TEACHING METHODS**

Teaching letters involves several different methods. Many children learn the ordering of letter names by learning the alphabet song. Rather than the traditional tune, this is best sung to a nursery rhyme or other well-known song (examples: Mary Had a Little Lamb) so letter names are distinguished as separate units rather than run together as in “elemenopee.”

Alphabet books read to children provide practice in seeing shapes and hearing names and sounds. Several programs teach children how to form letters, which strokes to write first and in what order. Students learn writing posture, pencil grip, and the most efficient ways to write letters.

Mnemonic systems have been developed to help students learn the large set of associations between letters and sounds. Some programs use sets of characters to help children link the shapes of letters to their sounds, for example, teaching the letter S as Sammy Snake whose shape forms a snake and whose initial sound is /s/. The strength of these mnemonics is in helping children remember the associations.

Multisensory approaches have students practice letters using visual, auditory, and kinesthetic-tactile modalities. Students see the letters, hear the corresponding sounds, and write and say the letter names and/or sounds.

Programs to teach phonics systematically include a scope and sequence to insure that the major letter-sound correspondences are taught and practiced during the first two years of instruction. Most programs first cover single letter-sound relations involving consonants and short vowels, followed by digraphs and long vowels.

Typically, developing beginning readers acquire letter knowledge with sufficient instruction and practice. However, LD/RD learners often have difficulty and need more practice. Multi-sensory methods, mnemonic methods, and methods focusing on articulatory gestures have been developed to address their learning problems. ELL learners may lack the vocabulary needed to benefit from the terms used in mnemonics. They may also have difficulty learning letter-sound relations for phonemes that are not present in their first language.

It is essential that instruction be directed at establishing the various forms of letter knowledge in memory. That is, methods of instruction must adopt the appropriate conditions of learning that enable children to remember the alphabetic information that is taught. Simple exposure without much practice will not be sufficient, especially for LD/RD students. The goal of instruction should be not only accuracy of recall but also speedy and close to automatic recall.

### **4. ASSESSMENT**

Letter knowledge is easily assessed with tasks that require children to write or point to the letters that correspond to names or sounds, or to say the sounds of letters that are presented on cards, or to select letter tiles or plastic letters to spell the sounds in words that are dictated. After accuracy has been established, assessment of the speed of naming letters can be done by stopwatch, using a game-like format.

### **5. MOTIVATION**

Use of alphabet songs, books, characters, mirrors to explore mouth movements, and games to practice letter-sound relations, all enhance students’ interest in attending to and practicing letters. Children feel



empowered when they experience the use of this knowledge to write messages or to read words in their environment or in books.

## 6. LINKAGE TO OTHER READER ACQUISITIONS

Mastery of alphabet letters is a prerequisite for making progress in learning to read independently. Learners need to acquire knowledge of the shapes, names, and sounds of letters so that they can recognize the shapes automatically when they are seen in words and so that the shapes can be reproduced from memory in writing words. Names are needed to identify and distinguish among letters and to talk about the constituents of words' spellings. Letter-sound relations are needed to decode novel words, to remember how to read words by sight, and to spell words. Progress in acquiring reading skill cannot occur without a solid alphabetic foundation.

## REFERENCES FOR PHONICS

- Alaska Department of Education and Early Development (2003). Reading report card. Retrieved from <http://www.eed.state.ak.us/stats/>, 6/5/2004.
- Ambruster, B. & Osborn, J. (2001). Put reading first: The research building blocks for teaching children to read. Jessup, M.D.: Partnership for Reading, [www.nifl.gov](http://www.nifl.gov).
- Barker, T. A., Torgesen, J. A. & Wagner, R. K. (1992). The role of orthographic processing skills on five different reading tasks. *Reading Research Quarterly*, 27, 334-45.
- Bell, Nanci (1997). *Seeing Stars: Symbol Imagery for Phonemic Awareness, Sight words and Spelling*. San Luis Obispo, C.A.: Gander Publishing.
- Bernthal J. E., & N. W. Bankson (Eds.). (1994). *Child Phonology: Characteristics, Assessment, and Intervention with Special Populations*. New York: Thieme.
- Blachman, B. A., Tangel, D. M., Ball, E. W., Black, R. & McGraw, C. K. (1999). Developing phonological awareness and word recognition skills: A two-year intervention with low-income, inner-city children. *Reading and Writing: An Interdisciplinary Journal*, 11, 239-273.
- Bruck, M. (1992). Persistence of dyslexics' phonological awareness deficits. *Developmental Psychology*, 28, 874-886.
- Calfee, R.C., & Piontkowski, D.C. (1981). The reading diary: acquisition of decoding. *Reading Research Quarterly*, 3, 346-372.
- Calvert, Sandra L. (1991). Impact of singing on students' verbatim recall and learning.
- Coles, R.W., & Goodman, Y. (1980). Do we really need those oversized pencils to write with? *Theory into Practice*, 19, 194-196.
- Cossu, G. (1997). Domain-specificity and fractionability of neuropsychological processes in Literacy Acquisition. In Pontecorvo, C. (Ed.) *Writing development: An interdisciplinary view*, 243-258. Philadelphia, PA: John Benjamin's Publishing.
- Ehri, L. C. (1992). Reconceptualizing the development of sight word reading and its relationship to recoding. In Gough, P.B., Ehri, L.C. & Treiman, R. (Eds.), *Reading Acquisition*, 107-143. Hillsdale, NJ.: Erl-

baum, Associates.

- Felton, R. H. (1993). Effects of Instruction on the Decoding Skills of Children with Phonological-Processing Problems. *Journal of Learning Disabilities*, 26, 583-589.
- Foorman, B.R., & Liberman, D. (1989). Visual and phonological processing of words: A comparison of good and poor readers. *Journal of Learning Disabilities*, 22, 349-355.
- Fry, E. (1994). 1000 Instant Words: The Most Common Words for Teaching Reading, Writing and Spelling. Laguna Beach, C.A.: Laguna Beach Educational Books.
- Gillam, R.B., & van Kleeck, A., (1996). Phonological awareness training and short-term working memory: Clinical implications. *Topics in Language Disorders*, November, 72-81.
- Heilman, K. M., Voeller, K. & Alexander, A. W. (1996). Developmental dyslexia: A motor-articulatory feedback hypothesis. *Annals of Neurology*, 39, 407-12.
- Henderson, L., & Chard, J. (1980). The reader's implicit knowledge of orthographic structure. In U. Frith (Ed.), *Cognitive processes in spelling*. London: Academic Press.
- Johnston, R. S., Anderson, M., & Holligan, C. (1996). Knowledge of the alphabet and explicit awareness of phonemes in pre-readers: The nature of the relationship. *Reading and Writing: An Interdisciplinary Journal*, 8, 217-234.
- Lance, D. M., Swanson, L. A., & Peterson, H. A. (1997). A validity study of an implicit phonological awareness paradigm. *Journal of Speech-Language, and Hearing Research*, 40, 1002-1010.
- Lander, K., Frith, U., Wimmer, H. (1996). Intrusion of orthographic knowledge on phoneme awareness: Strong in normal readers, weak in dyslexic readers. *Applied Psycholinguistics*, 17, 1-14.
- Lindamood, C.H. & Lindamood, P.C. (1975). *Auditory discrimination in depth*. Austin, TX: PRO-ED.
- Lindamood, C.H., & Lindamood, P.C. (1979). *Lindamood Auditory Conceptualization Test*. Austin, TX: DLM Teaching Resources.
- Lindamood, P. C., Bell, N., & Lindamood, P. (1992). Issues in phonological awareness assessment. *Annals of Dyslexia*, 42, 242-259.
- Lindamood, P., Bell, N., & Lindamood, P. (1997). Sensory-cognitive factors in the controversy over reading instruction. *The Journal of Developmental and Learning Disorders*, 1, 143-182.
- Lindamood, P., & Lindamood, P. (1998). *Lindamood phoneme sequencing program for reading, spelling, and speech*, 3rd edition, Austin, TX: PRO-ED.
- Lindamood-Bell Learning Processes (2000). *The role of symbol imagery in phonological and orthographic processing*. Research presented at the Lindamood-Bell™ 9th Annual International Conference, March 2001.
- Lyon, R.G., (2001, March). Measuring success: Using assessments and accountability to raise student achievement. Paper presented to the Subcommittee on Education Reform Committee on Education and the Workforce, U.S. House of Representatives, Washington, D.C.
- Mykelbust, H. R. (1973). *Development and disorders of written language Volume 2*. New York: Grune & Stratton.

- National Reading Panel (2002) Report. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implication for reading instruction – reports of the sub-groups. National Reading Panel, retrieved 6/5/04 from [www.nationalreadingpanel.org](http://www.nationalreadingpanel.org).
- Olsen, R., Wise, B., Johnson, M. & Rack, J. (1994). Measurement of word recognition, orthographic and phonological skills. In G.R. Lyon (Ed.). *Frames of reference for the assessment of learning disabilities*, 243-77. Baltimore, MD: Brookes Publishing.
- Phillips, G. (2001, April 24). No change in average NCE Statistics fourth-grade reading scores. National Center for Educational Statistics. Article posted to <http://educationnews.org>.
- Pratt, A. C., Brady, S. (1988). Relationship of phonological awareness to reading disability in children and adults. *Journal of Educational Psychology*, 80, 319-323.
- Scanlon, D. M. & Vellutino, F. R. (1997). A comparison of the instructional backgrounds and cognitive profiles of poor, average, and good readers who were initially identified as at risk for reading failure. *Scientific Studies of Reading*, 1, 191-215.
- Shaywitz, B. & Shaywitz, S. (2004). Development of left occipitotemporal systems for skilled reading in children after a phonologically-based intervention. *Biological Psychiatry*, 55, 926-933.
- Singson, M, Mahoney, D. & Mann, V. (2000). The relation between reading ability and morphological skills: Evidence from derivational suffixes. *Reading and Writing: An Interdisciplinary Journal*, 12, 219-252.
- Spalding, R.B., & Spalding, W.T. (1962). *The Writing Road to Reading*, New York: William Morrow & Co. 1962, p. 74.
- Stuart, M. (1999). Getting ready for reading: Early phoneme awareness and phonics teaching improves reading and spelling in inner-city second language learners. *British Journal of Psychology*, 69, 587-605.
- Swank, L. K. (1995). Phonology, metaphonolgy, and reading: Why the confusion? *The Clinical Connection*, 9, 4-8.
- Torgesen, J. K., Wagner, R. K., & Rahotte, C. A. (1994). Longitudinal studies of phonological processing and reading. *Journal of Learning Disabilities*, 27, 276-286.
- Vail, Priscilla (1991). *Common Ground Whole Language and Phonics Working Together*. Rosemont, N.J.: Modern Learning Press.
- Vellutino, F. R., Scanlon, D. M., & Tanzman, M.S. (1994). Components of reading ability: Issues and problems in operationalizing word identifications, phonological coding, and orthographic coding. In G.R. Lyon (Ed.), *Frames of reference for the assessment of learning disabilities* (pp. 279-332). Baltimore, M.D.: Brookes.
- Wagner, R. K. & Torgesen, J. K. (1987). The nature of phonological processing and its causal role in the acquisition of reading skills. *Psychological Bulletin*, 101, 192-212.
- Worthington, P. (2003, Feb. 17). Scientifically based reading research. Presentation remarks made at the Alaska Statewide Special Education Conference, Anchorage, AK.
- Yavas, M. S., Gogate, L. J. (1999). Phoneme awareness in children: A function of sonority. *Journal of Psycholinguistic Research*, 28, 245-26.

**APPENDIX C: SUPPORT MATERIALS**

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## TEACHING HANDWRITING

Alaska Reading does not go into detail on teaching of handwriting, even though it is an important skill to be taught during the early grades. It can effectively be taught with learning the letters and sounds of the alphabet. Most school districts have adopted handwriting curriculum and when followed handwriting is taught effectively.

Below are key points teachers should know about handwriting regardless of program they use.

### HANDWRITING AWARENESS:

We want to show our students how to angle their paper, how to hold their pencils, etc. Writing from left to write, leaving margins, starting at the top and going down, all require knowledge of spatial concepts. Spending time teaching these concepts is helpful for your students.

1. Students discover what is needed to write.
  - eyes, head, body, arm, writing implement, paper, writing surface.
2. Students discover writing posture.
  - elbow on the desk
  - non-writing hand holding paper
  - fingers on the pencil correctly
  - feet on floor
  - proper head tilt

(Students experiencing handwriting difficulty have four common characteristics: unconventional grip, fingers very near the pencil point, difficulty in erasing, and trouble with letter alignment (Bain, Bailet, & Moats, 1991).
3. Students learn directional and distance words.
  - same/different, middle/center, side/edge, closer/farther, near/far, top/bottom, over/under, above/below, away/towards, left/right.
  - three dimensional (in room), then two dimensional (on paper).
4. Students learn the three kinds of lines.
  - Straight (horizontal, vertical), diagonal, curved
    - For lower-case writing, only six different strokes are necessary, all falling into the category of straight, diagonal, and curved (Spalding & Spalding, 1962).
5. Students write/air-write letters and progressively longer words, matched in length to the number of phonemes they can process.
  - Image letters/words
  - Air-write letters
    - eyes up, index finger of dominant hand up, writing just a little larger than normal, writing slow enough to see a shadow effect, eyes watching finger.

- Finger writing on a desk is a good halfway step to air writing for very young students or those with difficulty with abstract concepts.

- Trace letters/words

- Copy letters/words

- Write letters/words

- Unlined paper, lined paper.

Specifications for materials, types of writing implements, space between lines on paper, and transitioning from one type of paper to the next are not well documented (Coles & Goodman, 1980).

6. Students write in context.

- Dictated letters, words, and sentences
- Self-generated letters, words, and sentences
- Journals, captions for pictures, sign-in sheets

37 Most Commonly Used Words in the English Language	
me	ten
do	tan
and	tin
go	ton
of	bed
on	top
a	he
it	you
is	will
she	we
can	an
see	my
run	up
the	last
in	not
so	us
no	am
now	good
man	

## CONSONANT AND VOWEL SUBSTITUTION TEST

The following is a test of the ability of primary children to use vowel and consonant substitution (a common decoding strategy used in basal reading programs). The first list uses common words normally found in first grade readers. The second list uses more uncommon words but with similar spelling patterns. Try them for both spelling and reading tests.

(Please repeat the word after dictating the sentence.)

not	I will <b>not</b> go there.	not
wag	See the dog <b>wag</b> his tail.	wag
cub	The bear was a young <b>cub</b> .	cub
skip	Betty can <b>skip</b> well.	skip
Bob	<b>Bob</b> is coming to dinner.	Bob
tap	Can you <b>tap</b> dance?	tap
pet	I have a <b>pet</b> rabbit.	pet
did	<b>Did</b> you like the show?	did
frog	I have a pet <b>frog</b> also.	frog
sun	The <b>sun</b> is out today.	sun
jump	Can you <b>jump</b> the rope?	jump
help	Please <b>help</b> me.	help
quits	Tom <b>quits</b> work at five.	quit
jot	<b>Jot</b> down this word.	juot
wax	I will <b>wax</b> the floor.	wax
hub	I found a <b>hub</b> cap.	cap
zip	<b>Zip</b> up your pants.	zip
cob	Eat this <b>cob</b> of corn.	cob
gap	The fence has a <b>gap</b> .	gap
vet	Take the dog to the <b>vet</b> .	vet
skid	The car won't <b>skid</b> .	skid
fret	Don't worry and <b>fret</b> .	fret
spun	The spider <b>spun</b> his web.	spun
dump	Bill has a <b>dump</b> truck.	dump
yelp	Did the dog <b>yelp</b> ?	yelp
quilt	There's a <b>quilt</b> here.	quilt

–Author Unknown



THE 70 ORTON PHONOGRAMS

PHONO (SOUND)—GRAMS (WRITE)

by Samuel T. Orton

b	3	a	er	ay	3	oo	3	ey
2	c	2	ir	ai	3	ch		eigh
d	2	i	ur			ng	3	ei
f	3	o	wor	2	ow	3	ea	igh
2	g	3	ear	4	ou	ar	3	ie
h	2	y				ck		kn
j			sh	aw	3	ed		gn
k			ee	au		or		wr
l			2	th	2	wh		ph
m					2	oa		dge
n					2			oe
p								tch
qu								ti
r				oy			2	si
2	s			oi				ci
t		1	w				6	ough
v			x					
			y					
			z					

## MASTERY PHONICS WORD LIST

Give this simple spelling test to your second grade and above students. These words contain most of the common spelling patterns. If your students can spell most of them correctly, you can feel confident that they have a reasonable mastery of phonics.

rack	fact	cross	wife	pie	champ
fizz	camp	scrub	stone	might	pound
box	grab	drum	cube	groan	cook
cuff	speck	tramp	tray	glow	gang
yell	cliff	frost	drain	glue	heavy
melt	trim	trade	beet	jar	shape
hint	blob	Pete	squeak	worn	purr
term	thud	claw	twirl	ditch	point
stall	zing	twice	watch	chunk	hinge
howl	cool	mast			

—Author Unknown

## LINKS LEARNING BIBLIOGRAPHY

- Adams, M. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: MIT Press.
- Adams, M., & Bruck, M. (1995). Resolving the “Great Debate.” *American Educator*, 8, 7-20.
- Adams, M., Foorman, B., Lundberg, L., & Beeler, T. (1998). *Phonemic awareness in young children: A classroom curriculum*. Baltimore, MD: Brookes Publishing Co.
- Bear, D., Invernizzi, M., Templeton, S., & Johnston, F. (2000). *Words their way: Word study for phonics, vocabulary, and spelling instruction*. Upper Saddle River, NJ: Merrill.
- Blachman, B. (2000). *Phonological awareness*. In M. Kamil, P. Mosenthal, P. D. Pearson, & R. Barr (Eds.) *Handbook of reading research* (Vol. III, pp. 483-502). Mahway, NJ: Lawrence Erlbaum Associates, Inc.
- Blevins, W. (1998). *Phonics from A to Z*. New York: Scholastic.
- Bond, G., & Dykstra, R. (1967). *The cooperative research program in first grade reading*. *Reading Research Quarterly*, 2, 5-142.
- Calfee, R. (1998). *Phonics and phonemes: Learning to decode in a literature-based program*. In J. Metsala and L. Ehri (Ed.). *Word recognition in beginning literacy*. Mahwah, NJ: Erlbaum.
- Calkins, L. (1986). *The art of teaching writing*. Portsmouth, NH: Heinemann.
- Chall, J. (1996). *Learning to read: The great debate*. New York: McGraw Hill.
- Clay, M. (1993). *Reading recovery: A guidebook for teachers in training*. Portsmouth, NH: Heinemann.
- Clymer, T. (1963). *The utility of phonic generalizations in the primary grades*. *The Reading Teacher*, 16, 252-258.
- Clymer, T. (1996). *The utility of phonic generalizations in the primary grades*. *The Reading Teacher*, 50, 182-187.
- Cooper, J. D. (2000). *Literacy: Helping children construct meaning*. 4th ed. Boston, MA: Houghton Mifflin Company.
- Cunningham, P. (1995). *Phonics they use: Words for reading and writing*. 2nd ed. New York: Harper Collins College Publishers.
- Cunningham, P., & Cunningham, J. (1992). *Making words: Enhancing the invented spelling-decoding connection*. *The Reading Teacher*, 46, 106-115.
- Cooter, R. B., Reutzel, D. R., & Cooter, K. S. (1998). *Sequence of development and instruction for phonemic awareness*. Unpublished paper.
- Dahl, K., Scharer, P., Lawson, L., & Grogan, P. (2001). *Rethinking phonics: Making the best teaching decisions*. Portsmouth, NH: Heinemann.
- Dahl, K., & Freppon, P. (1995). *A comparison of inner-city children's interpretations of reading and writing instruction in the early grades in skills-based and whole language classrooms*. *Reading Research Quarterly*, 30, 50-74.

- Ehri, L., Deffner, N., & Wilce, L. (1984, October). *Pictorial mnemonics for phonics*. *Journal of Educational Psychology*, 880-93.
- Feitelson, D., Kita, R., & Goldstein, Z. (1986). *Effects of listening to series stories on first graders' comprehension and the use of language*. *Research in the Teaching of English*, 20, 339-356.
- Fox, B. (2000). *Word identification strategies: Phonics from a new perspective*. 2nd ed. Upper Saddle River, NJ: Merrill.
- Gaskins, I., Ehri, L., Cress, C., O'Hara, C., & Donnelly, K. (1996/1997). *Procedures for word learning: Making discoveries about words*. *The Reading Teacher*, 50, 312-327.
- Gipe, J. (1998). *Multiple paths to literacy: Corrective reading techniques for classroom teachers*. 4th ed. Upper Saddle River, NJ: Merrill.
- Gunning, T. (2000). *Phonological awareness and primary phonics*. Allyn & Bacon.
- Hancock, M. *Fun phonics manipulatives*. (See Linda Jenkins)
- Haynes, M., & Jenkins, J. (1986). *Reading instruction in special education resource rooms*. *American Educational Research Journal*, 23, 161-190.
- Hiebert, E. H., & Raphael, T. (1998). *Early literacy instruction*. Fort Worth, TX: Harcourt Brace College Publishers.
- Hiebert, E. H., Pearson, P.D., Taylor, B.M., Richardson, V., & Paris, S.G. (1998). *Every child a reader*. Topic 2: Concepts of print, letter naming, and phonemic awareness.
- MI: Center for the Improvement of Early Reading Achievement (CIERA).
- Hiebert, E. H., Pearson, P.D., Taylor, B.M., Richardson, V., & Paris, S.G. (1998). *Every child a reader*. Topic 3: Phonics and word recognition accuracy. MI: Center for the Improvement of Early Reading Achievement (CIERA).
- International Reading Association and the National Association for the Education of Young Children. (1998). *Learning to read and write: Developmentally appropriate practices for young children: A joint position statement of the International Reading Association (IRA) and the National Association for the Education of Young Children*. Newark, DE: Author.
- Kean, M., Summers, A., Raivetz, M., & Farber, I. (1979). *What works in reading? Summary and results of a joint school district/Federal Reserve Bank empirical study in Philadelphia*. Philadelphia: Office of Research and Evaluation. (ERIC Document Reproduction Service ED 176 216)
- Leinhardt, G., Zigmond, N., & Cooley, W. (1981). *Reading instruction and its effects*. *American Educational Research Journal*, 18, 343-361.
- McGee, L., & Richgels, D. (2000). *Literacy's beginnings: Supporting young readers and writers*. Boston: Allyn and Bacon.
- Morrow, L., & Tracey, D. (1998). *Motivating contexts for young children's literacy development: Implications for word recognition development*. In J. Metsala & L. Ehri (Eds.), *Word recognition in beginning literacy*. Mahway, NJ: Erlbaum.

- Moustafa, M. (1997). *Beyond traditional phonics: Research discoveries and reading instruction*. Portsmouth, NH: Heinemann.
- National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. Summary Report. <http://www.nichd.nih.gov/publications/nrp/smallbook.pdf>
- Neuman, S., Copple, C., & Bredekamp, S. (2000). *Learning to read and write: Developmentally appropriate practices for young children*. Washington, D.C.: National Association for the Education of Young Children.
- Osborn, J. (1984). *The purposes, uses, and contents of workbooks and some guidelines for publishers*. In R. Anderson, J. Osborn, & R. Tierney (Eds.). *Learning to read in American schools: Basal readers and content texts* (pp. 45-112). Hillsdale, NJ: Erlbaum.
- Pinnell, G. S., & Fountas, I. C. (1998). *Word matters: Teaching phonics and spelling in the reading/writing classroom*. Portsmouth, NH: Heinemann.
- Pressley, M., Rankin, J., & Yakoi, L. (1996). *A survey of instructional practices of primary teachers nominated as effective in promoting literacy*. *Elementary School Journal*, 96, 363-384.
- Routman, R. (1996). *Literacy at the crossroads*. Portsmouth, NH: Heinemann.
- Samuels, S., Schermer, N., & Reinking, D. (1992). *Reading fluency: Techniques for making decoding automatic*. In S. Samuels & A. Farstrup (Eds.). *What research says about reading instruction* (2nd ed., pp. 124-144). Newark, DE: International Reading Association.
- Schatschneider, C., Francis, D., Foorman, B., Fletcher, J., & Mehta, R. (1999). *The dimensionality of phonological awareness: An application of item response theory*. *Journal of Educational Psychology*, 91, 439-449.
- Snow, C. E., Burns, M. S., & Griffin, P. (1998). *Preventing reading difficulties in young children*. Washington, D.C.: National Academy Press.
- Stahl, S., Osborn, J., & Pearson, P. D. (1994). *Six teachers in their classrooms: Looking closely at beginning reading* (Tech. Rep. No. 606). Champaign, IL: Center of the Study of Reading, University of Illinois at Urbana-Champaign.
- Stahl, S., Duffy-Hester, A., & Dougherty, K.A. (1998, Jul/Aug/Sep.). *Everything you wanted to know about phonics (but were afraid to ask)*. *Reading Research Quarterly*, 33(3), 339-355.
- Turner, J.C. (1995). *The influence of classroom contexts on young children's motivation for literacy*. *Reading Research Quarterly*, 30, 410-441.
- Weaver, C. (1994). *Reading process and practice: From socio-psycholinguistics to whole language*. Portsmouth, NH: Heinemann.
- Yopp, H.K. (1992). *Developing phonemic awareness in young children*. *The Reading Teacher*, 45, 696-703.
- Yopp, H.K., & Yopp, R.H. (2000). *Supporting phonemic awareness development in the classroom*. *The Reading Teacher*, 54, 130-143.

# ALASKA READING

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## Volume II: Alphabet Foundation Part 3: Word Study & Early Phonics

### PARTICIPANT GUIDE

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#### OBJECTIVES

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By the end of this session, participants will be able to identify instructional knowledge that supports reader acquisition in the areas of word study and spelling for all grades, and the effect of Anglo-Saxon, Greek and Latin on the English language.

- Participants will understand how spelling enhances students; phonemic awareness and letter-sound knowledge, which contribute to growth in learning to read and spell. (Linkage to Other Reader Acquisitions)
- Participants will understand how it is important for students to be able to read text without having to stop and decode too many words. (Motivation)
- Participants will understand how spelling correctly contributes to reading and writing skills. (Learner Process)
- Participants will identify the characteristics of early spelling. (Teaching Methods)
- Participants will understand the role of pseudo-words for assessing decoding skills. (Assessment)
- Participants will understand the latest research results in spelling and word study and its affect on academic success. (Learner Process)
- Participants will understand the role of word study in fluency and comprehension in all curricular readings. (Learner Process)
- Participants will understand spelling develops in stages. (Learner Process)
- Participants will learn specific strategies to instruct students in word families, word parts, (prefixes, roots, and suffixes), and origins (Anglo-Saxon, Latin or Greek) (Structure of Language)
- Participants will understand the importance of these languages when students begin reading by acquiring decoding skills, building a sight vocabulary, reading words by analogy and spelling words. (Learner Process)

(The first 6 objectives are from the in depth portion of early decoding and spelling recommended for K-6 teachers.)

#### VIDEO SUMMARY

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Marcia K. Henry, Ph.D., has a doctorate from Stanford University in educational psychology and 43 years of experience in the field of reading and dyslexia, working as a teacher, diagnostician, tutor, and professor. In this video Dr. Henry disusses the effect of Anglo-Saxon, Greek and Latin have on word origins in the English language both in reading and early spelling. She discusses the importance of these languages when students begin reading by acquiring decoding skills, building a sight vocabulary, reading words by analogy and spelling words.

# FACILITATOR SYLLABUS/PARTICIPANT NOTE-TAKING GUIDE BY MARCIA HENRY, PH.D.

## RESEARCH:

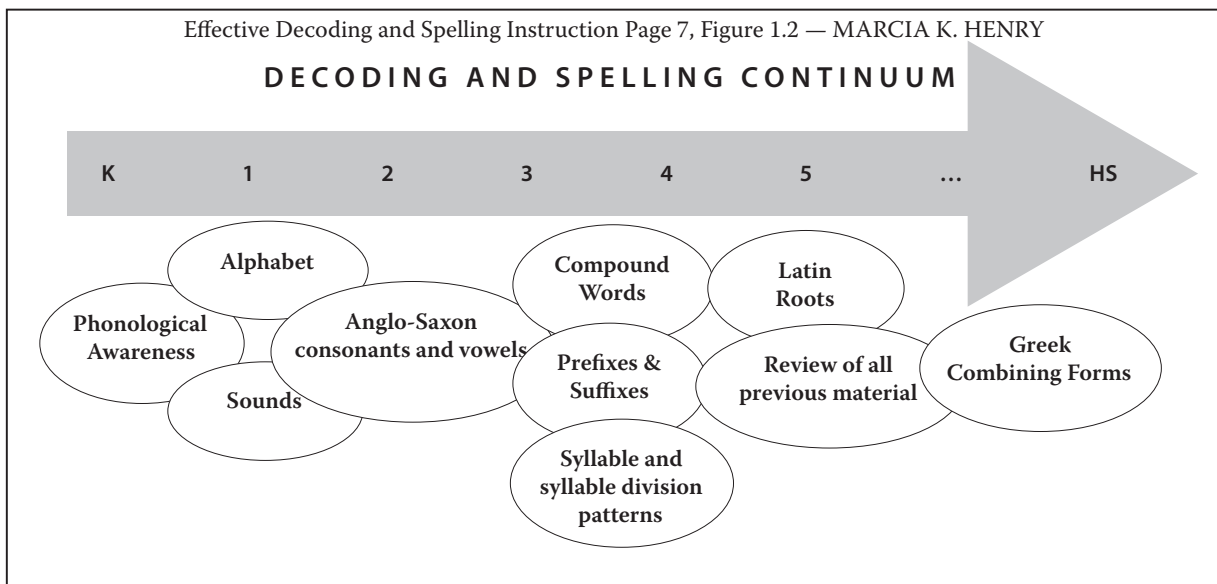
### Factors Involved in Word Study

- A. Decoding
- B. Sight Vocabulary
- C. Analogizing
- D. Prediction
- E. Spelling

### Alphabetic Foundation/Principle:

- A. Phonemic awareness
- B. Letter name and corresponding sounds (Phonics)
- C. Developmental nature of spelling

Additional Information: The decoding-spelling continuum across the grades is supported by the work of several researchers in the field of reading and spelling who have theorized that learners move through developmental stages as they begin to read and spell (Bear, 1992; Chall, 1993; Ehri, 1992; Frith, 1980; E.H. Henderson, 1990; Perfetti, 1984, 1985.) These stages generally move from pre-alphabetic, to partial alphabetic, to mature, and then to consolidated alphabetic phases for reading multi-syllabic words.



Programs need to integrate decoding, spelling, and word study because patterns for decoding are the same for spelling.

Reading does not develop naturally and for many children, specific decoding, word recognition, and reading comprehension skills must be taught directly and systematically.

—G. R. Lyon. Why Reading is Not a Natural Process. IDA Newbriefs, January /February 2000.

**Practice Activity:** Check for Understanding. Give participants “Framework for Curriculum and Instruction” located in Appendix C.

I. Framework for Curriculum and Instruction Based on Word Origin and Word Structure

Matrix for organizing what a teacher needs to teach.

	Letter-Sound Correspondences	Syllable Patterns	Morpheme Patterns
Anglo-Saxon			
Latin			
Greek			

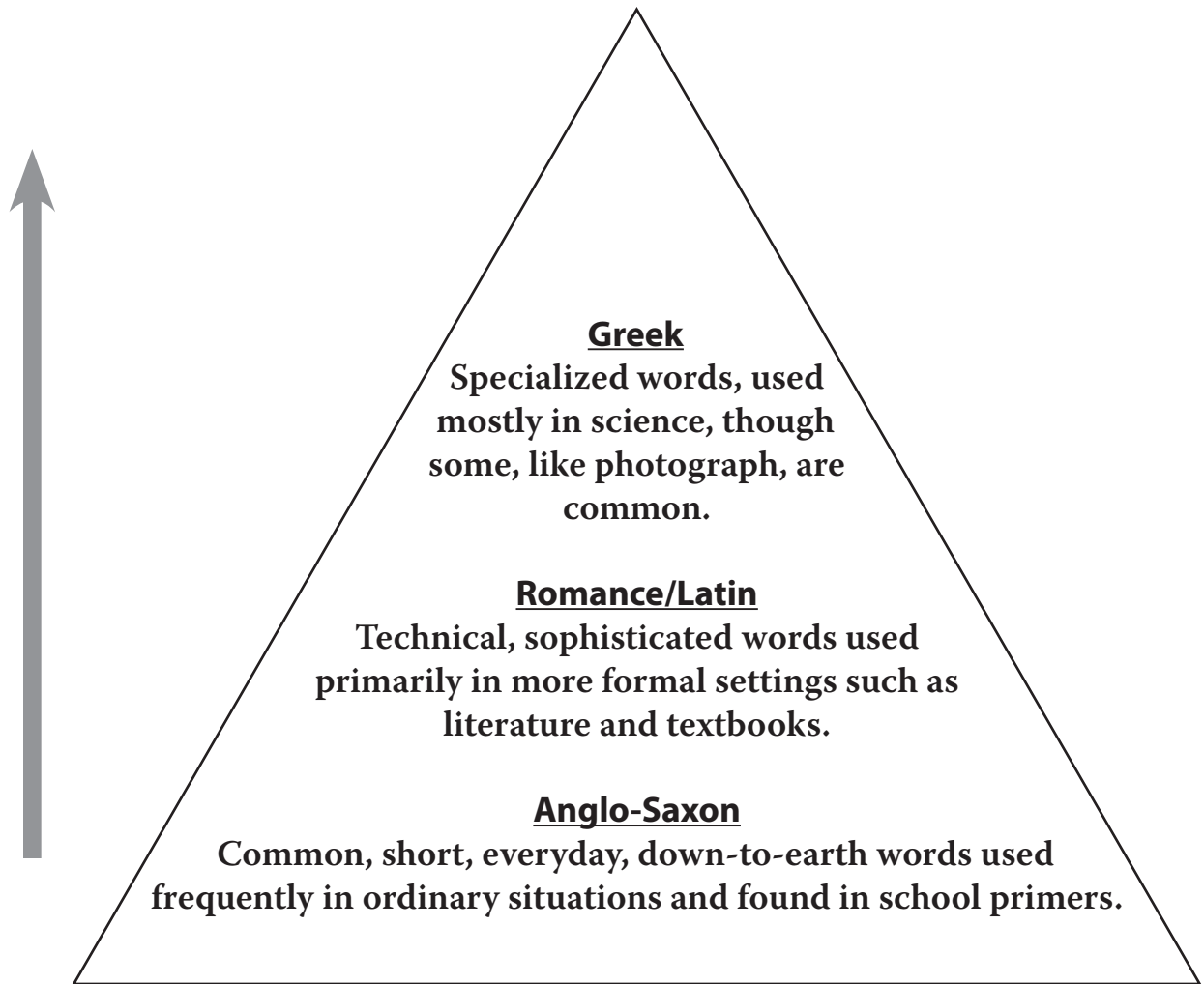
Framework for Curriculum and Instruction Based on Word Origin and Word Structure  
Henry, 1987, 2003

**Practice Activity:** Reflections: Framework Matrix. Reflect on your notes and information you just learned from the video. Write one or two sentences that you think are the most important information from this part of the video that might impact your reading instruction in the classroom. How does this information impact teaching children in Alaska’s schools to read? (Be sure to include discussion on indigenous languages and how this affects language development for Alaska Native students).



Overview of Word Origin: How Words are Built

A. Layers of Language



–M. Henry, 1987; Calfee & Associates, Stanford University

The information in the triangle summarizes the three major language origins influencing English and provides a brief description of the types of words and several examples from each layer; however, other cultures also added to the English language, especially to American English, such as kayak, igloo, etc.

**Practice Activity:** Discussion – Facilitator is to check for understanding of this section. Please have students refer back to what was learned in phonics.

### III. Anglo-Saxon Layer of Language

“Words of Anglo-Saxon origin are characterized as the common, everyday, down-to earth words used frequently in ordinary situations. Nist (1966) provided a clever inventory of some of the Anglo-Saxon words in English today.

English remains preeminently Anglo-Saxon at its core; in the suprasegmentals of its stress, pitch and juncture patterns and in its vocabulary. No matter whether a man is American, British, Canadian, Australian, New Zealander or South African, he still *loves his mother, father, brother, sister, wife, son and daughter; lifts his hand to his head, his cup to his mouth, his eye to heaven and his heart to God; hates his foes, likes his friends, kisses his kin and buries his dead; draws his breath, eats his bread, drinks his water, stands his watch, wipes his sweat, feels his sorrow, weeps his tears and sheds his blood; and all these things he thinks about and calls both good and bad.* (1966, p.9)”

—*Unlocking Literacy: Effective Decoding & Spelling Instruction*, Marcia K. Henry; pp 6,

Notes:

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**Practice Activity:** Discussion: Review and Connections. Facilitator is to be sure students understand the connection between phonics in last section and discussion here.

**The next section goes into depth with phonics and word study. It is best used for K-6 and special education teachers. It ends with “web on word” just before IV: Latin Layers of Language. The Facilitator will decide whether or not it will be viewed by all K-12 teachers or other secondary options will be used.**

## A. Anglo-Saxon Letter-Sound Correspondences In-Depth Continued

### Anglo-Saxon Letter-Sound Correspondence

<i>Consonants</i>		
Single	Blends	Digraphs
b c d f g h k j l m n p q r s t v w x y z	<b>Initial:</b> bl-, cl-, fl-, gl-, pl-, sl-; br-, cr-, dr-, fr-, gr-, pr-, tr-; sc-, sl-, sm-, sn-, sp-, st-; tw-; scr-, str-; spl-; spr-... <b>Final:</b> -lf, -lk, -lp, -mp-, -nd, -st...	<b>Initial:</b> wh-, gn-, kn-, wr-.... <b>Initial or Final:</b> ch, sh, th, (thin), th, (that).... <b>Final:</b> -ck, -tch....
<i>Vowels</i>		
Short/Long	r- and l- controlled	Digraphs
a mad/made e pet/Pete i pin/pine o rob/robe u cut/cute	ar or er, ir, ur al, all....	<b>One sound:</b> ai, ay, ee, oa, aw, au, ou, ue, ew, igh, eigh.... <b>Two sounds:</b> ae, ie, ei, oo, ow, ey....

—Anglo-Saxon Letter-Sound Correspondence Matrix [ Calfee, R. C., et al. (1981-1984)]

#### Key Points:

- Single letter consonants (graphemes), one sound (phonemes)
- Consonant Blend: Two or three adjacent consonants. These retain both their individual sounds.
- Consonant Digraphs: Two consonants come together to make one sound, voice and un-voice pairs.
- Vowels: Short and long
- r-and l- controlled vowels: ar, er, ir, or, ur.
- Vowel Digraphs: Hard for kids. Blended sight and sound.
- Activities for reinforcement and fluency in blending: Letter stand with individual letters on cards.

Practice word families by changing letter in initial position. Next change in ending position. Last, change letter in medial position.

#### Notes:

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Lederer (1991) in his book The Miracle of Language (New York: Pocket Books) says that “One study shows that 20 words account for 25% of all spoken English words, and all 20 are monosyllabic.” In order of frequency they are:

1.	I	11.	in
2.	you	12.	what
3.	the	13.	he
4.	a	14.	this
5.	to	15.	have
6.	is	16.	do
7.	it	17.	she
8.	that	18.	no
9.	of	19.	on
10.	and	20.	they

#### Example of Non-phonetic Words

the	a	have	of	off
one	only	once	do	does
to	two	where	there	they
are	says	said	again	want
you	your	who	any	many
been	some	come	from	other
pull	put	push	love	friend
door	their	often	through	very
walk	talk	would	could	should

#### Spelling Rules:

Corresponding rules must be taught for some vowel and consonant patterns

1. Vowel/consonant + e: mad, made, cod, code
2. “hard” and “soft” c and g  
c before e, i, and y = /s/  
g before e, i, and y = /j/
3. words ending in l, f, s, and z after a short vowel, double l, f, s, and z
4. words with a short vowel ending in the sound of /k/, /ch/, /j/ = ck, tch, dge

Notes: Let students discover the rule. Show them the words, let them discover the rules of one syllable word with a short vowel.

**Practice Activity:** Four Spelling Rules: Participants, with a partner, are to design a spelling practice activity for each spelling rule. If time share one from each group with rest of class. (Pair-Share-Jigsaw Teaching).

## B. Anglo-Saxon Syllable Patterns:

### 1. Syllable Types

	Syllable Type	Symbol	Examples
74% of reading texts in first and second grade are made up of these patterns.	Closed (short vowel)	VC	mat, fin, cot, fun
	Vowel-consonant e	VCE	made, hope, time, cute
Useful for reading and spelling.	Open (long vowel)	CV	go, be, me, she
	Vowel pair	CVV	boat, coin, broom, pain
	Consonant -le	C-le	table, bubble, turtle, giggle
	-r controlled	vR	car, church, bird, earth

### 2. Common Patterns for Syllable Division

Pattern	Examples
VC/CV (Closed)	cam-pus, nap-kin, ham-let, cut-let
V/CV (Open)	o-pen, pi-lot, Po-lish, de-light, pre-vent
VC/V (Closed)	cab-in, lem-on, pol-ish, com-et, im-age
/C -le	bu-gle, bub-ble, pur-ple, set-tle
CV/VC (Open)	cre-ate, po-em, o-a-sis, the-or-y

Key Points of video demonstration for syllable division:

- Vowel sound: opened and voiced and the vowels are a, e, i, o, u.
- Consonant sounds: blocked or partially blocked by our teeth, tongue or lips.
- Definition of a syllable: a word or part of a word made by one opening of the mouth.
- Closed syllable: ends in a consonant and the vowel is short in a closed syllable.
- Open syllable: ends in a vowel and the vowel is usually long in an open syllable.
- Accent causes the mouth to open wider and the voice to be higher and louder.

Ask children to use the word in a sentence after the word has been divided.

**Practice Activity:** Discuss the common patterns for syllable division. Practice dividing words from the five types of patterns.

## Anglo-Saxon Morpheme Patterns

### 1. Compound 2 base words:

railroad	baseball	flashlight	lamppost
bookmark	fireplace	cowboy	bluebird
starfish	shoebox	skyline	homework
backpack	butterfly	birdhouse	schoolroom

### 2. Affix to base word:

<b>help</b>	helper	unhelpful	unhelpfully
<b>play</b>	playing	replay	replayed
<b>read</b>	reading	reread	misread
<b>spell</b>	respell	misspell	misspelled

**Practice Activity:** Check for understanding.

### 3. Spelling Rules for Adding Suffixes

#### a. Dropping final -e

When a base word ends with final e, drop the e before adding a suffix beginning with a vowel.

Examples: take – taking- fine – finer

stone – stony–pale – palest

But, time – timely –blame – blameless

pale – paleness–hope – hopeless

#### b. Double consonant rule

- One syllable words: A word ending in one consonant, preceded by one vowel, doubles the final consonant when adding a suffix starting with a vowel. Examples:

big, bigger, biggest

fit, fitter, fitting, but fit becomes fitness

ship, shipped, shipping, but ship becomes shipment

**(Often called the 1-1-1 rule).**

- Polysyllabic words: Under the conditions of (a.), double the final consonant if the final syllable in the base word is accented.

Example: be–gin', beginning

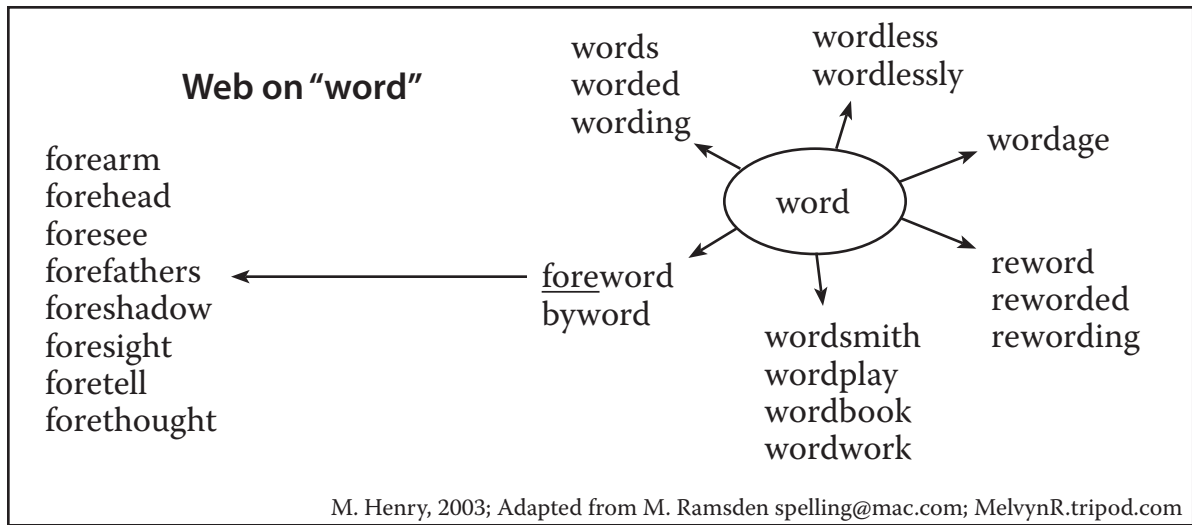
But, o'–pen, becomes opening

c. Suffix addition rules: –y to i:

- When a base word ends in y, change the y to i before adding a suffix: Examples:  
try, tried  
cry, crier  
carry, carried  
tiny, tinier, tiniest
- Unless the y is preceded by a vowel: Examples:  
play, player, played, playful, playing
- Unless the suffix begins with an i (-ing, -ish, -ist) Examples:  
fly, flying  
baby, babyish  
copy, copyist

d. The Schwa

- (The neutral vowel in unaccented syllables in English words)
- Anglo-Saxon: (Suffixes will be schwaed, prefixes may be)  
a+sleep    asleep            old+en            olden  
green+est    greenest            care+less            careless



**Practice Activity:** With a partner discuss other fun activities for adding suffixes to words that could be used in your classroom.

The in-depth section for K-6 and special education teachers ends here. All K-12 teachers should participate in the rest of word study beginning with IV: Latin Layers of Language.

#### IV. Latin Layer of Language

	Letter-Sound Correspondences	Syllable Patterns	Morpheme Patterns
Anglo-Saxon			
Latin			
Greek			

Framework for Curriculum and Instruction Based on Word Origin and Word Structure  
Henry, 1987, 2003

#### A. Letter-Sound Correspondences

Key Points:

- Letter-Sound correspondences same as Anglo-Saxon
- Latin word roots have almost no vowel digraphs (easier for spelling)
- Makes Latin more difficult in L/S correspondence is the schwa
- Latin word roots cannot stand alone
- Need to add prefixes and suffixes
- Most Latin word roots end in two consonants
- Syllable division same in Latin as in Anglo-Saxon

Key Points: What can be learned about a student's knowledge of spelling by dictation:

- rules for adding suffixes
- basic sight words
- transposes letters
- past tense spelling
- inconsistent

Key Points: Why spelling is more difficult than reading.

- Spelling = producing
- Reading = retrieving the code



Key points:

- Teach to the intellect

Example:

- ist—only used for people, as in dentist.
- est—adjective as in biggest.

## B. Syllable Patterns

The main syllable types found in Latin roots include closed (e.g., spect, rupt, script); VC+e (e.g., scribe, -voke); and r-controlled (eg., port, form). Patterns of syllable division are similar to those found in words of Anglo-Saxon origin.

Alan, before receiving specific instruction with a language therapist.

## C. Morpheme Patterns

Common Latin prefixes and suffixes

### 1. Prefixes

<b>Short vowel, closed syllable:</b>
dis, ex, in, mid, mis, sub , un, with, non, trans, en, mal , (il, im, suf, sug, sum, sup, sus)
<b>Short vowel and/or schwa:</b>
a, con, se, (at, ap, as, ac, ap; col, com)
<b>Long vowel, open syllable:</b>
Be, de, re, pre, pro, tri, twi Bi, co, di, e, o, (post)
<b>-r controlled:</b>
ar, per, sur, fore, (cor, ir)
<b>2 syllable prefixes:</b>
ambi, anti, circum, contra, counter, extra, intra, inter, intro, multi, over, super, ultra

Key Points:

- Drill audit orally and visually.
- Going for automaticity.
- No special rules for prefixes; just add to the base word.

## 2. Suffixes

The following common suffixes are arranged in a suggested order of presentation based on the frequency of use of the suffixes and their adjacent roots.

1	2	3	4
er	ion (tion, sion)	ar	ism
ed	most	ible, ibility	ious
ing	ous	ize	ory
en	or	ary	cial, cian
est	ess	ate	cious, tious
less	ure (ture)	ward	ation
ness	dom	age	tial
ful	ent, ence	al	cy
ly	an	ic	ile
fold	ant, ance	ity	ade
ship	ist	ee	ium
hood	ive	fy, ify	ian
able, ability	some	ty, ity	
y	ment	ling	

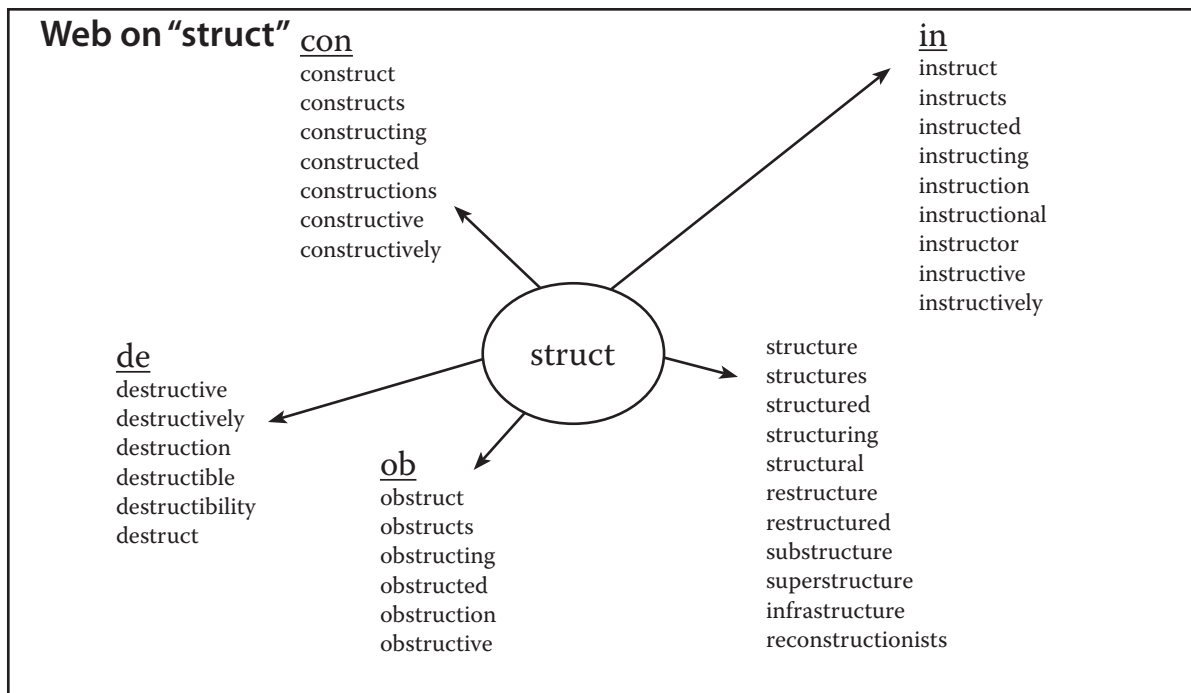
Notes: Suffix -ion, ian \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

### Key Points:

- Richard Lederer says in *The Miracle of Language*, there are over 615,000 words in the New Oxford Unabridged Dictionary.
- Go to the dictionary. No one can know everything about 615,000 words!
- 50-55 very common suffixes students need to learn.
- Justification to go beyond phonics!
- Cannot compound Latin roots; must add suffixes.

### 3. Latin Word Roots: Order of Presentation

form	port	rupt	tract
scrib/script	spec/spect	stru/struct	dic/dict
flect/flex	mit/miss	fer	cred
duc/duce/duct	pel/puls	vert/vers	pend/pens
fac/fact/fect/fic	jac/jec/ject	tend/tens/tent	cur/curs
ped/pod	vis/vid	aud	leg
viv/vivi/vit/vita	greg	capit/capt	spir/spire
cap/cep/cept/cip	grad/gress/gred	voc/voke	leg/lect
Lit/liter/litera	cede/ceed/cess	ten/tain/tin	feder/fid/fide/feal
sta/stit/sist/stet	cad/cas/cid	pon/pose	cern/cert
mob/mot/mov	/genus	cise/cide	



4. Chameleon Prefixes (Assimilated prefixes)

<b>in</b> (in, not)			invite, insist, increase, invest
<b>il</b>	+	<b>l</b>	illegal, illegible, illustrate, illiterate
<b>ir</b>	+	<b>r</b>	irregular, irritate, irrigate, irrode
<b>im</b>	+	<b>m</b>	immune, immortal, immoral
	+	<b>b</b>	imbibe, imbalance, imbecile
	+	<b>p</b>	impart, import, impress, improve
<b>con</b> (together, with)			connect, convene, convince
<b>col</b>	+	<b>l</b>	collect, collide, collusion, collate
<b>cor</b>	+	<b>r</b>	correct, corrupt, corrode, correspond
<b>com</b>	+	<b>m</b>	commit, commute, commune, comment
	+	<b>b</b>	combine, combust, combat, combatant
	+	<b>p</b>	compare, compute, compact, complaint
<b>sub</b> (under, from below)			subway, submarine
<b>suc</b>	+	<b>c</b>	success, succeed, succulent
<b>suf</b>	+	<b>f</b>	suffer, suffuse, sufficient
<b>sug</b>	+	<b>g</b>	suggest, suggestive
<b>sup</b>	+	<b>p</b>	support, suppose, suppress

5. Progression of activities related to Latin Morphemes

- Circle the Latin word root (recognition)
- Matching Latin roots with meaning (choice and contrast)
- Write the meaning of the word root (retrieve from memory)
- Fill in the blank (application)
- Replace words with Latin word (use in context)
- Contrast pairs of words (deeper understanding)

**Practice Activity:** Word Root: Divide the class into small groups. Assign a word root. Have participants replicate the activity done on the video.

V. Greek Layer of Language

	Letter-Sound Correspondences	Syllable Patterns	Morpheme Patterns
Anglo-Saxon			
Latin			
Greek			

Framework for Curriculum and Instruction Based on Word Origin and Word Structure  
Henry, 1987, 2003

The following passage from a middle-school science text shows not only how short words of Anglo-Saxon origin mix with longer Romance words but also how the scientific terminology is couched in words of Greek origin (italicized).

Suppose you could examine a green part of a plant under the *microscope*. What would you see? Here are some cells from the green part of a plant.

The cells have small green bodies shaped like footballs. They give the plant its green color. They are call *chloroplasts*. A single green plant cell looks like this.

*Chloroplasts* are very important to a plant. As you know, plants make their own food. This food-making process is call *photosynthesis*. It is in these *chloroplasts* that *photosynthesis* takes place (Cooper, Blackwood, Boeschen, Giddings, & Carin, 1985, p. 20, emphasis added.)

A. Greek Letter-Sound Correspondences

Similar to those found in words of Anglo-Saxon origin, but words of Greek origin also often incorporate new letter-sound correspondences.

B. Syllable Patterns

1. Syllable types most prevalent in Greek-based words are closed (CVC, as in graph) and open (CV, as in each syllable of pho/to).
2. Syllable division generally follows the rules for Anglo-Saxon words. Combining forms such as semi (VC/V), hemi (VC/V), and micro (V/CCV) do not follow V/CV or VC/CV division. Students seldom need to depend on strategies for syllable division in Greek-based words because they learn the orthographic patterns as wholes.

C. Morpheme Patterns

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Different people use different terms to describe the Greek word parts. In some dictionaries and books they are called ‘root’, in some they become ‘combining form’, in others they are known as ‘prefixes’ and ‘suffixes’. We will call them ‘combining forms’ as usually there are two parts of equal stress and importance that are combined, almost as in the Anglo-Saxon compound words. Some of the parts come only at the beginning of a word, and others come at the end. Some forms can be used in either position.

—Words, Integrated Decoding and Spelling Instruction Based on Word Origin and Word Structure, Marcia K Henry, Pro-Ed, p. 47

### Greek Combining Forms Order of Presentation:

phon/phono	photo	graph/gram	auto
tele	ology	micro	meter
therm	bio	scope	hydro
biblio	crat/cracy	geo	metro
polis	dem	derm	cycl
hypo	hyper	chron	chrom
phys	psych	techni	lex
path	peri	hemi/semi/	demi
poly	mon/mono	gon	sphere
cogn	meta	mega	arch
mech	kine/cine	phil	soph
the/theo	andr/anthr	phobia	mania
ast(astro)	archae/arche		

### Activities Related to Greek Combining Forms

- *Nym* and *onym* are the Greek roots meaning name. Find as many words as possible ending in onym. Give examples of pseudonyms, antonyms, synonyms, and homonyms.
- Select unfamiliar words and ask questions related to word origin, clues, meaning, definition, etc. Example: Analyze the word pterodactyl. What is its origin? What are the two combining forms? What is the meaning of ptero and dactyl? In what subject areas might you find this word?
- Make a web for a Greek combining form such as phon/phono.
- Give students a sentence with an unknown word such as “Heterographs” abound in the English language. Students study word using a dictionary & thesaurus to find its origin, meaning, and synonyms. Have them look for additional examples (inquiry/enquiry; catalog/catalogue).

- Matching: Match the letter of the correct meaning with the Greek Combining form:

_____ micro	A. sound
_____ ology	B. life
_____ auto	C. watch or see
_____ graph, gram	D. self
_____ therm	E. distant
_____ tele	F. small
_____ bio	G. study
_____ phon, phono	H. water
_____ scope	I. heat
_____ hydro	J. written or drawn

- Have students categorize words in a textbook chapter according to origin. Prehistoric Times

Anglo-Saxon	Latin	Greek
earthquake	ancestors	tectonics
embedded	evolution	anthropologist
hunter	extinct	geologist
spearhead	aggregate	archaeology
imprint	volcano	pterodactyl

**Practice Activity: Content Areas.** Look over the reinforcement activities for Greek combining forms below. Discuss applications of these types of activities in content areas. Design one activity and assessments appropriate to your grade level.

## VI. Importance of developing sight words for reading

### A. Definition of Sight Words:

1. Sight words are words read quickly and automatically from memory.
2. Sight words can be phonetically regular (e.g., run, jump, stop, cry) or irregular (e.g., eye, laugh, want, what).
3. In early grades, students read text that has many sight words and a few words they do not know and must decode.
4. Decoding provides the means for establishing sight words in memory.

### B. Reading New Words by Analogy to Known Words

1. Learner reads an unfamiliar word by looking for connections between the unfamiliar words and known words.
2. Learner needs some decoding skills to use this strategy.
3. As learner's sight vocabulary grows, more words serve as analogs for reading new words with similar spellings.
4. A student who knows back, may be able to read  
sack, snack, shack, flack, pack, tack, etc.

### C. Predicting Words

1. The learner uses context cues to predict an unfamiliar word.
2. Prediction requires informative text and learner's rich oral vocabulary.

Try to predict the missing words from Frindle by A. Clements:

Mrs. Chatham squirmed a little in her chair and tried to smile. She said, "Well, we do still have a little \_\_\_\_\_, but it's under \_\_\_\_\_. Mrs. Granger may have \_\_\_\_\_ a bit. I don't think \_\_\_\_\_ children have really been \_\_\_\_\_. They are just \_\_\_\_\_ some fun, and it's more like a \_\_\_\_\_ of \_\_\_\_\_....."

## Summary of Best Practices in Phonics, Decoding and Word Attack

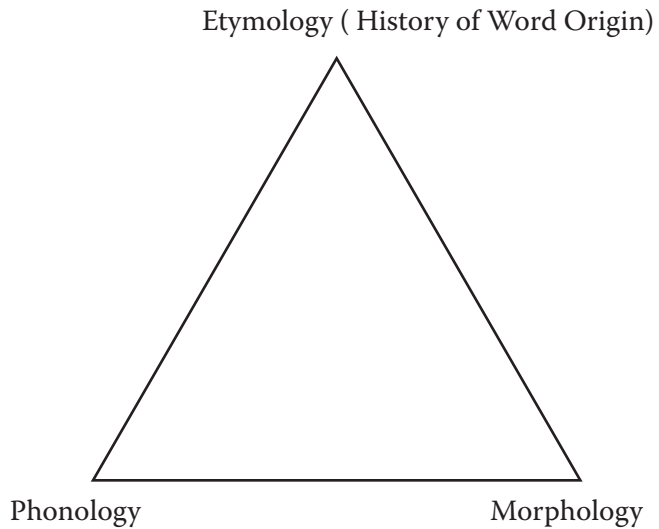
### California Comprehensive Reading and leadership Program

- Model and practice
- Teach blending of sounds-symbol links directly, systematically, explicitly, and sequentially.
- Include phonemic awareness in beginning lessons
- Clarify the identity of sounds and symbols
- Emphasize active, vocal learning
- Teach high frequency words as well as regular patterns
- Promote generalization, integrated skills into the context
- Check for fluent application



## Summary

### Orthographic Reference Points



Concept by Pete Bowers: The Analogy of Triangulation; Dennis Wimer: The Ologies of Language

## Final Comments by Dr. Henry

- Go beyond phonics!
- Study the history of the English language.
- Intrigue your students with how word origins influence the English orthography.
- Teach Latin and Greek morphemes so students can read upper level tests.
- Enjoy!

**Practice Activity:** Review and check for Understanding

**View Video:** Alaska Classroom Model: Middle School Math

**Assessment:** Participants will take assessment on word study.

## APPENDIX B: SHORT MATRIX

Volume II, Part 3: Word Study & Early Spelling					
Structure of Language	Learner Processes	Teaching Methods	Assessment	Motivation	Linkage to Other Reader Acquisitions
<ul style="list-style-type: none"> <li>• Sounds or phonemes (smallest units of sound in words)</li> <li>• Letters or graphemes (a letter or group of letters that represent phonemes in words)</li> <li>• Alphabetic writing system</li> </ul>	<ul style="list-style-type: none"> <li>• Novice learner begins to generate spellings using knowledge of letter-sound relationships</li> <li>• Invented spellings of first graders are strong predictors of reading achievement</li> <li>• Spelling develops in stages</li> <li>• Initial invented spellings use only salient consonant sounds</li> <li>• Students with LD/RD and ELL need intensive instruction, with adequate review and practice</li> </ul>	<ul style="list-style-type: none"> <li>• Early spelling begins when students have some knowledge of letters</li> <li>• Phonemic awareness instruction aids students in detecting sounds in the pronunciations of words</li> <li>• Students are involved in writing activities</li> <li>• If writing is difficult, students can use plastic letters or letter tiles</li> <li>• Teacher is sensitive to students' level of spelling development</li> </ul>	<ul style="list-style-type: none"> <li>• Analysis of features of students' spelling</li> <li>• Spellings are not assessed as right or wrong</li> <li>• Scoring systems that assign points for how many sounds in words are represented with letters with phonetic and/or conventional correspondences can be used for assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Writing messages and stories</li> </ul>	<ul style="list-style-type: none"> <li>• Spelling enhances students' phonemic awareness and letter-sound knowledge, which contribute to growth in learning to read and spell</li> </ul>

## APPENDIX B: SHORT MATRIX

Volume II, Part 3: Word Study & Early Spelling: Acquiring Decoding Skills					
Structure of Language	Learner Processes	Teaching Methods	Assessment	Motivation	Linkage to Other Reader Acquisitions
<ul style="list-style-type: none"> <li>Letters or graphemes that represent the smallest sounds or phonemes in words</li> <li>Sounds or phonemes that are represented by Rimes – vowel-consonant blends in one-syllable words; 37 rimes appear in over 500 words</li> <li>Words – families, word parts (prefixes, roots, suffixes), origins (Anglo-Saxon, Latin or Greek)</li> </ul>	<ul style="list-style-type: none"> <li>Learner can read unfamiliar words by transforming letters into sounds and blending the sounds to form recognizable words</li> <li>Learner needs to know what letters represent what sounds, know how to blend sounds to make words, and have flexibility that allows the learner to try other possibilities if the word is not recognizable</li> <li>Students with LD/RD and ELL need intensive instruction, with adequate review and practice</li> </ul>	<ul style="list-style-type: none"> <li>Synthetic phonics programs with explicit instruction and adequate practice</li> <li>A systematic scope and sequence that teaches consonants, short vowels, long vowels, digraphs, and consonant blends</li> <li>Use of controlled vocabulary text that conforms to what has been taught, so students can practice decoding skills</li> </ul>	<ul style="list-style-type: none"> <li>Purest assessment – students read pseudowords or nonwords that are ordered by difficulty</li> <li>Alternatively, students read regularly spelled real words, which might be known by the reader as sight words and may not purely measure letter-sound knowledge</li> </ul>	<ul style="list-style-type: none"> <li>Competitive games in which equally matched students read novel words</li> <li>Text that is easy for students to read without having to stop and decode too many words</li> </ul>	<ul style="list-style-type: none"> <li>Applying decoding skills to unfamiliar words activates the self-teaching mechanism</li> <li>Decoding skills increase the retention of words in memory</li> <li>Students develop a set of skills to read an unfamiliar word</li> <li>Decoding skills in combination of context cues and oral vocabulary can aid identity of difficult-to-decode words</li> <li>Aids spelling</li> </ul>

## APPENDIX B: SHORT MATRIX

Structure of Language	Learner Processes	Teaching Methods	Assessment	Motivation	Linkage to Other Reader Acquisitions
<ul style="list-style-type: none"> <li>Reliable phoneme-grapheme correspondences</li> <li>Common, reoccurring spelling or letter patterns</li> <li>Syllabic units of words</li> <li>Regularity of irregularly spelled words</li> <li>Specific forms of individual words</li> </ul>	<ul style="list-style-type: none"> <li>Sight words are words read quickly and automatically from memory</li> <li>Learner reads words from memory after practice reading them</li> <li>Learner's eye light on a written word; its pronunciation and meaning are activated in memory and the learner is able to recognize it</li> <li>Cues for storing words in memory is dependent on what the learner knows</li> <li>Students with LD/ RD and ELL need intensive instruction, with adequate practice</li> </ul>	<ul style="list-style-type: none"> <li>Instruction that teaches the grapheme-phoneme correspondences</li> <li>Adequate practice applying knowledge</li> <li>In early grades, students read text that has many sight words and a few words they do not know and must decode</li> <li>Decoding provides the means for establishing sight words in memory</li> <li>Students need to be taught that decoding is the primary strategy for word reading</li> <li>Guessing or skipping words does not establish words in memory</li> </ul>	<ul style="list-style-type: none"> <li>Students read words in isolation</li> <li>Published tests of sight word reading with a mix of regularly spelled and less regularly spelling words</li> <li>Some tests of word reading are timed</li> </ul>	<ul style="list-style-type: none"> <li>Students figure out unfamiliar words rather than skip or guess them</li> </ul>	<ul style="list-style-type: none"> <li>Knowledge of the alphabetic writing system and decoding skills build sight vocabulary</li> <li>Words held in memory facilitate decoding skills –sight vocabulary is key to facilitating text comprehension as the reader is free to give full attention to the construction of meaning rather than to the decoding of words</li> </ul>

Volume II, Part 3: Word Study & Early Spelling: Building a Sight Vocabulary

## APPENDIX B: SHORT MATRIX

Volume II, Part 3: Word Study & Early Spelling: Building New Words by Analogy to Known Words					
Structure of Language	Learner Processes	Teaching Methods	Assessment	Motivation	Linkage to Other Reader Acquisitions
<ul style="list-style-type: none"> <li>Words</li> <li>Common, reoccurring spelling or letter patterns in words</li> </ul>	<ul style="list-style-type: none"> <li>Learner reads an unfamiliar word by analogy to a known sight word by looking for connections between the unfamiliar words and known words</li> <li>Learner needs some decoding skills to use this strategy</li> <li>As learner's sight vocabulary grows, more words serve as analogs for reading new words with similar spellings</li> <li>Students with LD/RD and ELL will require special instruction to become aware and use known words as analogs</li> </ul>	<ul style="list-style-type: none"> <li>Words that contain major grapheme-phoneme correspondences and/or common, reoccurring spelling or letter patterns that can be used for analogy are introduced</li> <li>Students are taught to analyze words and remember the grapheme-phoneme correspondences and spelling patterns in words</li> </ul>	<ul style="list-style-type: none"> <li>Present pseudowords that are spelled just like real words for students to read</li> <li>Present irregularly spelled words whose spellings are altered by changing the initial letter for students to read</li> <li>Present a list of unfamiliar words that are spelled analogously to known sight words for students to read and to identify the analog</li> </ul>	<ul style="list-style-type: none"> <li>Challenge of reading words by analogy is like a puzzle and is a challenge to students</li> </ul>	<ul style="list-style-type: none"> <li>Students need words held in memory to be able to read unfamiliar words by analogy</li> <li>Blending skills aid the reading of unfamiliar words</li> <li>Analogizing is at a later stage than simply decoding unfamiliar words</li> </ul>

## APPENDIX B: SHORT MATRIX

Volume II, Part 3: Word Study & Early Spelling: Spelling Words					
Structure of Language	Learner Processes	Teaching Methods	Assessment	Motivation	Linkage to Other Reader Acquisitions
<ul style="list-style-type: none"> <li>Reliable grapheme-phoneme correspondences</li> <li>Conventional system of spelling words that involves multiple sources of regularity beyond grapheme-phoneme regularity</li> </ul>	<ul style="list-style-type: none"> <li>Learner may write or spell words from memory or learner generates spellings using alphabetic knowledge</li> <li>Beginning readers are poor at spelling and use invented spelling; quality of spelling is predictive of the learner's ability to learn to read</li> <li>As learner's knowledge and experience with specific words grows, his or her ability to remember the spelling of words increases</li> <li>Spelling is difficult for students with LD/RD</li> <li>ELL may also have difficulty with spelling</li> </ul>	<ul style="list-style-type: none"> <li>Explicit spelling instruction</li> <li>Beginning spellers are taught how to segment words into phonemes and which graphemes match which phonemes in conventional spelling</li> <li>Exposure to words through reading helps students form spellings of words in memory</li> </ul>	<ul style="list-style-type: none"> <li>Spelling is assessed through dictation tests</li> <li>Spelling ability can also be evaluated through text writing assignments</li> <li>Caveat to using text writing assessment: students may only use words the students know how to spell or the attention needed for composing and writing interfere with correct spelling</li> </ul>	<ul style="list-style-type: none"> <li>Learning to spell correctly contributes to reading and writing skills</li> </ul>	<ul style="list-style-type: none"> <li>Word reading and word spelling are highly correlated and closely related</li> <li>Fluency in handwriting is facilitated by correct spelling</li> <li>Memory for words may be weakened by use of electronic spell checkers</li> </ul>

## APPENDIX B LONG MATRIX: ACQUIRING DECODING SKILL

### STRUCTURE OF LANGUAGE

The English writing system is alphabetic consisting of letters or graphemes symbolizing the smallest sounds or phonemes in words. Many words have spellings conforming to this alphabetic system. For example, stop has four graphemes representing four phonemes. However, the system does not consist simply of single letters symbolizing single phonemes. Some phonemes are represented by two letters or digraphs, for example, sh, th, and ch. In some cases, the same letter may be used to spell several different phonemes, particularly the vowel letters, for example, a in hat, hate, all. In some cases, the same phoneme may be spelled in alternative ways, for example, /k/ may be spelled k, c, ck, q, or ch.

The regularity of some letter-sound correspondences depends upon the other letters accompanying them in words, for example, the spellings of vowel-consonant blends (rime spellings) in single-syllable words (e.g., ot in hot, ump in jump). These larger-unit spelling regularities involve multiple graphemes representing blends of phonemes. In English 37 rime spellings appear in over 500 different words.

As the major consonant and vowel patterns are taught, corresponding rules will be introduced. These include the addition of silent e (as in mad to made), when to use -ck, -tch, and -dge, when to use ll, ff, and ss, or rules for adding suffixes.

These and other regularities in English are found at the word level. There are families of words sharing the same parts. Although single words may appear irregular, once other members of the family are learned, the regularity becomes apparent, for example, talk, walk, and chalk. While most English words are considered “regular” (i.e., they follow letter-sound relationships), about 150 common words are “irregular” or non-phonetic. These words, usually non-phonetic in the vowel sound, include want, what, laugh, blood, eye, and friend.

In order to read words of more than one syllable, students need to learn about syllable and morpheme patterns. Students learn the six types of syllables, and gain strategies for dividing words into syllables. Morphemes are the meaning units found in words such as prefixes, roots, and suffixes. The word unhelpful contains the prefix un, the root help, and the suffix ful.

Words can be distinguished in terms of their language origin, Anglo-Saxon, Latin, and Greek. Teachers may wish to incorporate a unit on the history of written English and the numerous historical events that shaped English writing. Anglo-Saxon words are primarily short, everyday, down-to-earth words like run, jump, laugh, cry, and help. Latin roots are longer words often found in literature or social studies texts. Words of Latin origin provide another source of regularity for the spelling patterns in words. Roots are affixed by adding prefixes and suffixes to the Latin root as in constructive. Words of Greek origin have several unique letter-sound correspondences as the ch, ph, and y in chlorophyll. Greek-based words are commonly found in scientific texts. In sum, the spelling system in English has multiple sources of regularity, ranging from grapheme-phoneme correspondences at the letter-sound level to larger-unit spelling patterns at the syllabic level and word level.

## **LEARNER PROCESSES**

Some educators use decoding to refer to the general process of reading words. However, a more specific meaning is distinguished here. Decoding skill refers to the ability to read unfamiliar words by transforming letters into sounds and blending the sounds to form recognizable words. To do this, beginners need to know what sounds are typically symbolized by the letters, they need to know how to blend sounds to form words (phonemic awareness), and they need a set for flexibility so if one blend does not yield a recognizable word that fits the context, they can try another possibility.

Once students learn how graphemes symbolize phonemes, they can learn to decode simple words conforming to the correspondences they know. This helps them to build their memory for sight words. As their knowledge of sight words and the spelling regularities shared by different words grows, students become able to decode words using larger syllabic and subsyllabic units. This knowledge helps them decode multisyllabic words.

## **TEACHING METHODS**

Synthetic phonics programs provide explicit instruction and practice in how to sound out and blend words. Sometimes students are also asked to identify the phonics rules that apply in the words being read. Instruction is guided by a scope and sequence specifying the particular consonants and vowels that are covered during the course of instruction lasting 2-3 years. Typically students begin by decoding consonant-vowel-consonant words containing short vowels (i.e., a in hat, e in red, i in sit, o in hot, u in mud). Once these vowels are learned in several words, then students are taught long vowel spellings (i.e., vowel letters whose names are their sounds, for example, late, green, ride, road, cute). Also, the scope and sequence specifies when consonant digraphs, consonant blends, and other vowel digraphs (e.g., au, oi, ou) are introduced. Controlled vocabulary texts constructed mainly of words that conform to the phonics rules and patterns students have learned are typically provided for students to practice their decoding skill.

Explicit instruction on the other levels of regularity such as rime and morphological patterns need to be introduced fairly early so that several sources of decoding novel sequences are available. Although normally developing readers may induce the invariance in reading rimes and morphemes easily, RD/LD students may need special attention to making the larger patterns of regularity salient, by blocking words in families and highlighting the consistencies.

## **ASSESSMENT**

Two types of tasks might be used to assess students' ability to decode novel words. The purest measure is a pseudo word reading task, because pseudo words are clearly unfamiliar. Alternatively, students may be given regularly spelled words to decode but this approach leaves open the possibility that the words are already familiar sight words. In standardized word attack tasks assessing the range of decoding skill, pseudo words are ordered by difficulty, with short vowel items preceding long vowel items, with single consonant items preceding items with consonant blends and digraphs, and with single syllable items preceding multisyllabic items.



## MOTIVATION

Games that involve friendly competition between equally matched students might make practice decoding isolated words more attractive. Such games might present novel words printed on flashcards as Words from Mars for students to read.

Applying decoding skill to the reading of words in text is motivating if students are successful. However, if the text includes a large proportion of words that must be decoded, this will slow down reading, will inhibit getting the meaning, and will erode motivation.

## LINKAGE TO OTHER READER ACQUISITIONS

Once students learn to decode, they can apply this skill when they encounter unfamiliar words as they are reading text. Referred to as a self-teaching mechanism, this contributes to students' acquisition of a sight vocabulary. (See below.)

The application of decoding skill to the reading of unfamiliar words in text is considered essential for reading the words accurately and for retaining the words in memory as sight words. Decoding should be a primary strategy that students apply in reading unfamiliar words. The first step taken is to transform letters into sounds to derive a recognizable word that fits the context. For longer words, "peeling off" affixes and then decoding the root by phonics, rime, or morphemic patterns, is also a primary approach. If this is not successful, then secondary strategies such as using context and pictures to predict the word are used. However, once a prediction is generated, it should be checked against the spelling of the printed word to verify a match.

Acquiring decoding skill contributes to text reading in several ways. It helps students read unfamiliar words. As mentioned, it facilitates the formation of sight words in memory. When combined with context cues and a good oral vocabulary, it can help students predict the identities of words whose spellings are difficult to decode. Decoding skill also provides a source of redundancy during text reading. When familiar words are read by sight, decoding skill provides backup confirmation that the words were read accurately because the spoken form matches the spelling. Finally, as students read words accurately and automatically, fluency will be enhanced.

## LONG MATRIX: BUILDING A SIGHT VOCABULARY

### STRUCTURE OF LANGUAGE

The English spelling system is not a system that is perfectly predictable. One cannot apply phoneme-grapheme correspondence rules and generate correct spellings of individual words with complete reliability, because there are multiple ways that many words might be spelled while still conforming to the alphabetic system. For example, city might be spelled sittty or sitttey or sitttie or sidy or cidy, yet only one of these spellings is prescribed in dictionaries to be the correct form. In addition, a few words have spellings that do not conform to the alphabetic system, for example, yacht and bouquet. This variability and irregularity means that acquiring reading and writing skill involves learning the specific forms of some individual words.

Among the words that occur most frequently in English are function words whose spellings are not consistent with the major grapheme-phoneme correspondences taught to beginners, for example, said, was, are, come, do, to, have, look, want, and the. Although the consonant letters correspond predictably

to sounds, the vowel letters do not. Because these “nonphonetic” words are required to form meaningful sentences, their introduction cannot be avoided in beginning level texts constructed to limit the vocabulary to regularly spelled words.

## LEARNER PROCESSES

Although some educators reserve the term “sight word” to refer only to high frequency words or irregularly spelled words, we use the term to refer to all words that have become familiar and are read from memory.

Readers become able to read words from memory after they have practiced reading them at least once or a few times. However, RD/LD students need many more practices reading a word correctly to achieve sight recognition of it, as indexed by reliable and speedy identification. Whereas readers might use decoding, analogy or prediction strategies to read a novel word the first time they see it, once alphabetic features of the word are stored in memory, they can read it by sight. Sight word reading happens when a reader’s eyes light on a written word and immediately its pronunciation and meaning are activated in the reader’s memory enabling her to recognize the word. The hallmark of a skilled reader is being able to read words accurately and quickly by sight regardless of whether the words are seen in context or in isolation.

The cues that readers store in memory to read words by sight vary depending upon what readers know about the alphabetic system. Prereaders without any knowledge remember how to read words by storing strictly visual features, such as the golden arches forming MacDonalds, or the two round eyes in look. Once beginners learn letter names or sounds, they learn sight words by remembering how letters in spellings connect to sounds in pronunciations. At an early point in development, they might just remember beginning and ending letter-names or letter-sounds, for example the j and l whose names are heard in jail. As children acquire decoding skill and learn how the full array of letters connect to sounds in words, they retain the full spelling of the words in memory to read them by sight. Processing all the letters and sounds serves to fully secure sight words in memory and to eliminate confusion with other similarly spelled words. As children learn about spelling patterns in words, they retain sight words in memory by forming connections between spellings and pronunciations of larger syllabic units, for example the common spellings of syllables as in under-stand-a-ble, or the common spellings of morphemes as in under-stand-able.

Even irregularly spelled words can be retained in memory by forming connections between at least some graphemes and phonemes in those words. In most irregularly spelled words, the majority of the letters correspond predictably to sounds, for example, all but the s in island, all but the w in sword. This is true as well for the high frequency function words where the irregularities are limited mainly to the vowels. Thus, beginners can remember how to read even high frequency words using their alphabetic knowledge. These words do not have to be memorized in a non-alphabetic, visual way.

Sight word learning also entails being able to recognize individual words quickly and automatically. Words are recognized automatically when little attention or effort is required to read the words, when sight of the word is sufficient to activate its identity in memory (symbol imagery). Studies show that readers cannot intervene and keep themselves from recognizing words that are known automatically, despite their efforts to ignore the words. In addition, readers become able to read words very quickly, as quickly as they can name single numbers or letters. When they can do this, they are reading the words as single whole units rather than as a sequence of letters and sounds.

## **TEACHING METHODS**

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Effective sight word learning requires that readers possess full knowledge of the major grapheme-phoneme correspondences involving vowels so that when they read words, the full array of letters can become connected to sounds in pronunciations and the words can be stored in memory. Any instructional method that teaches students the grapheme-phonemic system and how to decode words provides the ingredients needed for effective sight word learning.

In addition, students need to practice applying their alphabetic knowledge as they encounter new words in text so that more and more sight words can accumulate in memory. In the early grades, instruction involves providing students with texts at an appropriate level, that is, texts containing many sight words that they have learned combined with some words that they do not know but can decode or can connect in memory once the words are identified. In order for text reading to promote sight word learning, students need to be taught to use decoding as a primary strategy for reading words. The reason is that decoding provides the means for establishing sight words in memory, by insuring that letters in spellings become connected to sounds in pronunciations. Learning to read morphemic units by sight will make the decoding of new longer words more reliable. If readers take a cursory glance at unfamiliar words, guess their identities, and move on, these words will not become established as well secured sight words in memory.

To secure sight words in memory, students need to develop symbol imagery skills simultaneously with a phoneme-grapheme system. This is achieved simply, by asking students to air-write (multi-sensory), read, and answer questions about letters and words, after they have been removed from sight. This is the most explicit way to stimulate the visual memory of words.

## **ASSESSMENT**

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To assess whether students have learned to read words by sight that they have practiced reading in text, they can be shown the words in isolation. Their ability to read the words immediately within one second of seeing them is an indication that they are reading the words from memory by sight. Presenting the words in isolation rather than in context verifies that the words can be recognized from their spellings alone without any contextual support.

Published tests of sight word reading consist of lists of words ordered by frequency of occurrence and hence difficulty. Typically the lists involve a mix of regularly spelled and less regularly spelled words. The number correctly read can be converted to grade-equivalent levels of performance. Tests that aim to assess only sight word reading restrict the list to irregularly spelled words that cannot be decoded. Some tests assess sight word reading by examining how many words students can read in a fixed period of time under the assumption that the more familiar the words, the faster they can be read.

## **MOTIVATION**

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Motivation to read independently is important for building a sight vocabulary because this increases the likelihood that students will be exposed to unfamiliar words. Motivation to decode letters and sounds to figure out unfamiliar words rather than to skip over the words is important to secure new sight words in memory. Using peeling-off procedures for longer words can be an enjoyable problem-solving approach to reading new words.

## **LINKAGE TO OTHER READER ACQUISITIONS**

As explained above, in order for readers to build a sight vocabulary of words that are well secured in memory, they need to have knowledge of the alphabetic system and decoding skill. As the full array of letters in sight words are accumulated in memory, letter patterns recurring in different words become known. This in turn facilitates decoding skill by enabling readers to read new words containing these letter patterns.

Possession of a sight vocabulary is a key ingredient facilitating text comprehension. When words in a text can be read from memory automatically by sight, this means that the words can be read without attention or effort. Readers are free to focus their attention on constructing the meaning of the text they are reading. In contrast, if readers have to apply decoding or prediction to read most words, this interrupts fluency, and diverts attention from the text and its meaning.

## **LONG MATRIX 3:** **READING NEW WORDS BY ANALOGY TO KNOWN WORDS**

### **STRUCTURE OF LANGUAGE**

As discussed above, spellings of many words in English share common parts. Especially common are families of words that rhyme and share spelling patterns, for example, bent, tent, rent, sent, and dent. There are also multi-syllabic words that have similarly spelled neighbors, such as mountain and fountain. As indicated above, the spellings of 37 rimes appear in over 500 English words.

### **LEARNER PROCESSES**

Another strategy for reading unfamiliar words besides decoding is reading the words by analogy to known sight words. This involves recognizing how part of a new word matches the spelling in a known word and then blending the new and known parts, for example, reading peak by analogy to beak. Studies indicate that children need to possess some decoding skill to use this strategy. As a reader's sight vocabulary grows, more known words become available as analogs for reading new similarly spelled words. Teaching students the strategy of looking for connections between known and new words enhances the likelihood that this procedure will be applied to read unfamiliar words. RD/LD students may need extra support to notice and learn the regularity in the rimes of various word families.

### **TEACHING METHODS**

Some programs teach students to analogize in reading new words. Over the course of a school year, students learn to read key words such as in, and, up, king, long, jump. The words are selected to cover the major grapheme-phoneme correspondences and common spelling patterns. Each week, 3 or 4 new words are taught, and students are given practice using these words to read other words sharing the same spelling patterns. As the words are learned, they are posted on the word wall in the classroom. However, the aim is for students to get the words into their heads as sight words so they do not need to depend on the word wall. To do this, students are taught to analyze and remember grapheme-phoneme correspondences in the words. RD/LD students often need the explicit teaching of rime regularities using visual supports such as blocking in rime families and highlighting the rimes, before they are able to use analogies.

## ASSESSMENT

One way to assess whether students read words by analogy is to determine which real words they can read, and then present them with pseudo words spelled just like the real words except for a different initial or final letter, for example, beak, neak. Another approach is to modify irregularly spelled real words by altering their first letter. Students' responses reveal whether they are using a decoding strategy or an analogy strategy. For example, island might be presented as the pseudo word fisland. If readers say "fisland" they are decoding the word whereas if they say "filand," they are analogizing.

The most straightforward way is to present unfamiliar words that are spelled analogously to known sight words and then to direct students to read the words by analogy and to identify the analog they are using.

## MOTIVATION

Reading words by analogy is like solving a puzzle, so the challenge may appeal to students who experience success. If students possess a large vocabulary of sight words, this strategy may yield more success than a decoding strategy.

## LINKAGE TO OTHER READER ACQUISITIONS

As mentioned above, students need to possess a repertoire of known words in order to analogize. Also having some decoding skill is needed to blend known and new parts. The strategy works best if the known words are drawn from the student's sight word memory rather than from a word wall. As the number of entries in memory grows, the procedure becomes more useful to students. Whereas decoding is an early emerging strategy for reading novel words, analogizing is a later emerging strategy, but one that needs explicit visual support for some students.

## LONG MATRIX 4: SPELLING WORDS

### STRUCTURE OF LANGUAGE

Compared to other more transparent writing systems, English words are relatively difficult to spell. As explained above, there are multiple sources of regularity that are complex and extend beyond the level of phoneme-grapheme regularity. This means that many words could be spelled in different ways and still conform to the alphabetic system broadly conceived. As a result, being able to spell English words correctly requires that the specific array of letters in each word must be known.

### LEARNER PROCESSES

There are two strategies that writers might use to spell words. If they are familiar with the words, they can write them from memory. If they do not remember seeing the words, they can use their alphabetic knowledge at the phoneme, rime or morpheme level to generate a plausible spelling.

Beginning readers are very poor at spelling words correctly. One reason is that they have only limited knowledge of the alphabetic system. This makes it hard for them to remember correct spellings of words because letters they see in words are not recognized as symbols for sounds in the words. Also this makes it hard to generate plausible spellings that conform to the conventional system. Another reason is that they



have not been exposed to very many words. Without exposure, spellings of individual words cannot begin to form in memory.

Although beginners may not spell words correctly, they can use their knowledge of letter names or sounds to invent spellings of words. Practicing this improves their ability to segment words into phonemes and to learn how letters symbolize phonemes in words. Even though beginning readers may not spell words correctly, the quality of their invented spellings is highly predictive of their ability to learn to read.

Once students learn the major grapheme-phoneme correspondences, they are capable of remembering the correct spellings of words that conform to their knowledge of the system. As their knowledge and experience with specific words grows, their ability to remember a larger number of spellings increases as well. Several stages of spelling development have been distinguished according to students' knowledge of the spelling system, beginning with partial, rudimentary knowledge of letter names and sounds, moving to more complete knowledge of conventional phoneme-grapheme relations, extending to spelling patterns in single-syllable words, and moving to spelling patterns in multi-syllabic words. Students' ability to remember spellings of specific words is limited by their stage of development, so teachers need to take account of this in their spelling instruction.

## **TEACHING METHODS**

Children may remember the correct spellings of some words as they learn to read sight words and retain the full array of letters in memory. However, spellings of words are more securely lodged in memory when explicit spelling instruction is provided. At the beginning, students are taught how to segment words into phonemes and which graphemes symbolize those phonemes in the conventional system, particularly vowel spellings. More advanced knowledge about the system is progressively taught. Students begin to listen for morphemes as they write polysyllabic words. At all points along the way, students apply their knowledge in learning to write sets of specific words from memory.

Because English requires that students learn the spellings of individual words, explicit spelling instruction should be provided throughout the elementary grades. Instruction includes teaching increasingly advanced levels of regularity and providing sufficient practice so the students remember words exhibiting these regularities. The instruction needs to be appropriate for individual students, that is, consistent with their stage of spelling development.

To spell a word correctly requires good visual memory. While students may fall back on phonemic awareness skills to help spell words they aren't sure about, rapid and accurate spelling requires the sensory-cognitive skill known as symbol imagery (see Fluency). Symbol imagery for spelling words should be directly taught by teaching students to "picture" the letters of a word in their mind after the word has been removed from sight. Start with shorter words and move to longer words, emphasizing orthographic patterns as they arise.

## **ASSESSMENT**

Students' memory for the spellings of words is assessed with dictation tests in which words that have been practiced are pronounced and defined, and students write the words. Students' ability to spell might

also be evaluated in text writing assignments. However, other factors influencing performance may obscure a view of students' spelling competence. For example, students may limit their compositions to

words they know how to spell. The extra burden of composing and writing down their thoughts may divert attention from spelling words correctly.

Standardized tests of spelling development organized by stages have been devised. A screening test is administered to distinguish the approximate stage, and then a diagnostic test at that stage is administered to obtain more detailed information about a students' knowledge.

## MOTIVATION

Learning to spell words correctly appears to be an important contributor to reading as well as writing skill. However, the incentive for cultivating memory for correct spellings may be weakened by the availability of electronic spell checkers.

## LINKAGE TO OTHER READER ACQUISITIONS

Word reading and word spelling abilities are highly correlated in general throughout the grades, indicating that the two processes are very closely related. Also fluency in writing is facilitated by knowing the correct spellings of words being written.

## References for Word Study

- Balmuth, M. (1992). *The roots of phonics*. Timonium, MD: York Press.
- Brown, K. (2003). *What do I say when they get stuck on a word? Aligning teachers' prompts with students' development*. *The Reading Teacher*, 56, 720-733.
- Calfee, R. C., & Henry, M. K. (1986). Project READ: *An inservice model for training classroom teachers in effective reading instruction*. In J. V. Hoffman (Ed.), *The effective teaching of reading: Research into practice* (pp. 199-229). Newark, DE: International Reading Association.
- Carlisle, J. F. (1995). *Morphological awareness and early reading achievement*. In L. B. Feldman (Ed.), *Morphological aspects of language processing* (pp. 189-209). Mahwah, NJ: Lawrence Erlbaum Associates.
- Chall, J. S., & Popp, H. M. (1996). *Teaching and assessing phonics*. Cambridge, MA: Educators Publishing Service.
- Ehri, L. (1991). *Development of the ability to read words*. In R. Barr, M. Kamil, P. Mosenthal, & P. D. Pearson (Eds.), *Handbook of reading research* (Vol. 2, pp. 383-417). New York: Longman.
- Ehri, L. (1992). *Reconceptualizing the development of sight word reading and its relationship to recoding*. In P. B. Gough, L. C. Ehri, & R. Treiman (Eds.), *Reading acquisition* (pp. 107-143). Mahwah, NJ: Lawrence Erlbaum Associates.
- Ehri, L. (1998). *Research on learning to read and spell: A personal-historical perspective*. *Scientific Studies in Reading*, 2 (2), 97-114.
- Ehri, L. (2002). *Phases of acquisition in learning to read words and implications for teaching*. *British Journal of Educational Psychology: Monograph Series*, 1, 7-28.
- Ehri, L., & McCormick, S. (1998). *Phases of word learning: Implications for instruction with delayed and*

- disabled readers*. Reading and Writing Quarterly, 14, 135-163.
- Ehri, L., Nunes, S., Stahl, S., & Willows, D. (2001). *Systematic phonics instruction helps students learn to read: Evidence from the National Reading Panel's Meta-Analysis*. Review of Educational Research, 71, 393-447.
- Felton, R. H. (1993). *Effects of instruction on the decoding skills of children with phonological-processing problems*. Journal of Learning Disabilities, 26 (9), 583-589.
- Frith, U. (Ed.). (1980). *Cognitive processes in spelling*. London: Academic Press.
- Gaskins, I., Downer, M., Anderson, R., Cunningham, P., Gaskins, R., Schommer, M., & The Teachers of Benchmark School. (1988). *A metacognitive approach to phonics: Using what you know to decode what you don't know*. Remedial and Special Education, 9, 36-41.
- Gaskins, I., Ehri, L., Cress, C., O'Hara, C., & Donnelly, K. (in press). *Procedures for word learning: Making discoveries about words*. The Reading Teacher.
- Griffith, P. (1991). *Phonemic awareness helps first graders invent spellings and third graders remember correct spellings*. Journal of Reading Behavior, 23, 215-233.
- Guttentag, R. & Haith, M. (1978). *Automatic processing as a function of age and reading ability*. Child Development, 49, 707-716.
- Hanna, P. R., Hodges, R. E., & Hanna, J. S. (1971). *Spelling: Structure and strategies*. Boston: Houghton Mifflin.
- Henderson, E. H. (1990). *Teaching spelling (2nd ed.)*. Boston: Houghton Mifflin.
- Henry, M. K. (1989). *Children's word structure knowledge: Implications for decoding and spelling instruction*. Reading and Writing: An Interdisciplinary Journal, 2, 135-152.
- Henry, M. K. (2003). *Unlocking literacy: Effective decoding and spelling instruction*. Baltimore: Paul H. Brookes Publishing Co.
- Joshi, R.M. & Aaron, P.G. (2000). *The componential model of reading: Simple view of reading made a little more complex*. Reading Psychology, 21, 85-97.
- Masonheimer, P., Drum, P., & Ehri, L. (1984). *Does environmental print identification lead children into word reading?* Journal of Reading Behavior, 16, 257-272.
- McCutchen, D., Abbott, R., Green, L., Beretvas, S., Cox, S., Potter, N., Quiroga, T. & Gray, A. (2002). *Beginning literacy: Links among teacher knowledge, teacher practice, and student learning*. Journal of Learning Disabilities, 35, 69-86.
- Metsala, J. & Ehri, L. (Eds.). (1998). *Word Recognition in Beginning Literacy*. Mahwah, NJ: Erlbaum.
- Moats, L. C. (1995). *Spelling: Development, disability, and instruction*. Timonium, MD: York Press.
- Moats, L. C. (2000). *Speech to print: Language essentials for teachers*. Timonium, MD: York Press.
- National Reading Panel (2000). *Teaching children to read*. (NIH Pub. No. 00-4754 - Ch. 2, section 2). Rockville, MD: Author.



- Nist, J. 1966. *A Structural History of English*. New York: St. Martins Press.
- Perfetti, C. (1985). *Reading ability*. New York: Oxford University Press.
- Pressley, M. (1998). *Reading instruction that works: The case for balanced teaching*. New York: The Guilford Press.
- Share, D. (1995). *Phonological recoding and self-teaching: sine qua non of reading acquisition*. *Cognition*, 55, 151-218.
- Share, D.L., & Stanovich, K.E. (1995). *Cognitive processes in early reading development: Accommodating individual differences into a model of acquisition*. *Issues in Education*, 1(1), 1-57.
- Stanback, M.L. (1992). *Analysis of frequency-based vocabulary of 17,602 words*. *Annals of Dyslexia*, 42, 196-221.
- Stanovich, K. (1980). *Toward an interactive-compensatory model of individual differences in the development of reading fluency*. *Reading Research Quarterly*, 16, 32-71.
- Templeton, S., & Morris, D. (2002). *Theory and research into practice: Questions teachers ask about spelling*. *Reading Research Quarterly*, 34, 102-112.
- Treiman, R. (1993). *Beginning to spell*. New York: Oxford University Press.
- Venezky, R. (1999). *The American way of spelling*. New York: Guildford Press.

#### Materials for Instruction

- Bear, D. R., Invernizzi, M., Templeton, S., & Johnson, F. (2001). *Words their way*. (2nd Ed.). Upper Saddle River, NJ: Merrill.
- Bebko, A. R., Alexander, J., & Doucent, R. (1998). *Language! Roots*. Longmont, CO: Sopris West.
- Bell, N. *Seeing Stars for Reading and Spelling*. [www.ganderpublishing.com](http://www.ganderpublishing.com) or 800-554-1819
- Bertin, P., & Perlman, E. (1980). *Preventing academic failure*. Cambridge, MA: Educators Publishing Service.
- Blanchard, C. *Word Root Series* (Level A grades 4-6, Level B grades 7-adult). Pacific Grove, CA: Critical Thinking Books and Software.
- Carreker, S. (2002). *Scientific spelling*. Houston, TX: Neuhaus Education Center.
- Carreker, S. (1998). *Language enrichment*. Houston, TX: Neuhaus Education Center.
- Fifer, N., & Flowers, N. (1990). *Vocabulary from Classical Roots*. Cambridge, MA: Educators Publishing Service.
- Fry, E. (1999). *Phonics patterns: Onset and Rime Word Lists*. Westminster, CA: Teacher Created Materials.
- Ganske, K. (2000). *Word Journeys*. New York: Guilford.
- Gillingham, A., & Stillman, B. W. (1997). *The Gillingham manual: Remedial training for children with spe-*

- cific disability in reading, spelling and penmanship*. Cambridge, MA: Educators Publishing Service.
- Henry, M. K., & Redding, N. C. (1996). *Patterns for success in reading and spelling*. Austin, TX: Pro-Ed. Letterland. [www.letterland.com](http://www.letterland.com)
- Marcellaro, E. G., & Ostrovsky, G. R. (1988). *Verbal vibes series*. Sacramento, CA: Lumen Publications.
- Morris, D. (1999). *The Howard Street Tutoring Manual: Teaching At-Risk Readers in the Primary Grades*. New York: Guilford.
- Redding, N. C., & Henry, M. K. (2004). *Patterns for Success in reading and spelling activity book*. Austin, TX: Pro-Ed.
- Rome, P. D., & Osman, J. S. (2000). *Advanced language tool kit*. Cambridge, MA: Educators Publishing Service.
- Rome, P. D., & Osman, J. S. (1993). *Language tool-kit*. Cambridge, MA: Educators Publishing Service.
- Slingerland, B. H., & Aho, M. (1994-1996). *A multi-sensory approach to language arts for specific language disability children (Rev. ed., Vols. 1-3)*. Cambridge, MA: Educators Publishing Service.
- Smith, M. T. *MTA reading and spelling program (Kits 1-7)*. Cambridge, MA: Educators Publishing Service.
- Spalding, R. B., with Spalding, W. T. (1990). *The writing road to reading: The Spalding Method of phonics for teaching speech, writing, and reading (4th rev. ed.)*. New York: Quill.
- Steere, A., Peck, C. Z., & Kahn, L. (1971). *Solving language difficulties*. Cambridge, MA: Educators Publishing Service.
- Wilson, B. A. (1988). *Wilson reading system*. Millblury, MA: Wilson Language Training.
- Wimer, D. B. (1994). *Word studies: A classical perspective, Prefixes + roots + suffixes*. Vol. 1. Richmond, VA: Dennis B. Wimer (PO Box 5362, Richmond, VA 23220).

## APPENDIX C: SUPPORT MATERIALS

For more information on presentations by Marcia Henry, Ph.D., please visit <http://alternativeed.sjsu.edu/mod13.html> where you will find Module 13; Strategies for Enhancing Decoding, Spelling and Vocabulary Instruction.

FRAMEWORK

Letter-Sound Correspondences	Syllable Patterns	Morpheme Patterns
Anglo-Saxon		
Latin		
Greek		

Framework for Curriculum and Instruction Based on Word Origin and Word Structure  
Henry, 1987, 2003

# ALASKA READING

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## Volume III: Fluency

### PARTICIPANT GUIDE

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#### OBJECTIVES

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By the end of this session, participants will be able to identify instructional knowledge that supports reader acquisition in the area of fluency.

- Participants will learn the components of fluency. (Structure of Language)
- Participants will learn about deficits that interfere with fluency. (Learner Process)
- Participants will learn teaching methods that develop fluency. (Teaching Methods)
- Participants will learn measures of fluency. (Assessment)
- Participant will understand the importance of decoding in reading fluency and comprehension. (Linkage to Other Reader Acquisition)
- Participants will understand that reading text is influenced by the reader's interest in the content of the text, its difficulty level, and whether reading serves a purpose for the reader. (Motivation)

#### VIDEO SUMMARY

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*Note: The following materials contain the same information as the video. It is included to help the facilitator better understand the content.*

Fluency is the ability to read a text accurately and quickly. When fluent readers read silently, they recognize words automatically. Readers who have not yet developed fluency read slowly, word by word. Their oral reading is choppy and plodding. Fluency is also important because it provides a bridge between word recognition and comprehension. Because fluent readers do not have to concentrate on decoding the words, they can focus on what the text means. The long-term goal of reading instruction is comprehension. In order to achieve this goal, students need to become fluent readers able to recognize words automatically, group individual words into meaningful phrases and apply rapid phonic, morphemic, and contextual analyses to identify unknown words. Fluency is defined as the rate (words per minute) and accuracy (number of words correctly identified). An additional dimension to fluency is known as prosody, or the rhythms and tones of spoken language.

**Contents of this section include components of fluency, difficulties with fluency, methods used to teach fluency, and how to measure fluency to determine instruction.**

**PARTICIPANT NOTE TAKING GUIDE**  
**BY SUZANNE CARREKER, C.A.L.T.**

Definition of Fluency:

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Lack of Fluency:

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Purpose of fluency:

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## PARTICIPANT NOTE TAKING GUIDE

### Fluency

1. Components of fluency
2. Deficits that interfere with fluency
3. Teaching methods
4. Measures of fluency

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### Components of Fluency

1. Accurate Decoding
2. Rapid Word Recognition
3. Prosody

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### Accurate Decoding

1. Phonemic Awareness/Rapid Letter Recognition
2. Alphabetic Principle
3. Sound/Symbol Correspondences
4. Six Syllable Types
5. Syllable Division Patterns
6. Morphological Units

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## PARTICIPANT NOTE TAKING GUIDE

### Rapid Word Recognition

1. Rapid recognition of letters
2. Rapid recognition of letter patterns
  - word families (at)
  - letter groups (vowel-consonant-e)
  - morphological units (prefixes, suffixes, roots, combining forms)
3. Rapid recognition of words

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### Prosody

1. Application of speech features to reading
2. Grouping of words into meaningful units

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## PRACTICE ACTIVITY: THREE COMPONENTS OF FLUENCY

### Fluency Deficits:

#### Phonemic or Decoding Deficit

- Difficulty with the phonemic aspects of words
- Poor performance on phonemic awareness and word identification measures
- Poor decoders but are able to rapidly recognize words they know

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## PARTICIPANT NOTE TAKING GUIDE

### Naming Speed Deficit

- Difficulty with the orthographic aspects of words
- Poor performance on Rapid Automatized Naming (RAN) measures
- Better decoders but are slow to recognize words they know

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### Double Deficit

- Difficulties with both the phonemic and orthographic aspects of words
- Poor decoders and slow at recognizing words

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## PRACTICE ACTIVITY: DISCUSS FLUENCY DEFICITS

### Teaching Methods:

#### Instruction

- Word Lists
- Rapid Word Recognition Charts
- Intonation Activities
- Phrasing Activities
- Vocabulary Webs, (including naming activities)
- Repeated Oral Reading

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**PARTICIPANT NOTE TAKING GUIDE**

Rapid Word Recognition Chart					
full	many	there	are	does	what
does	what	full	many	there	are
there	are	does	what	full	many
full	many	there	are	does	what
does	what	full	many	there	are

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RAPID WORD RECOGNITION CHART					
match	etch	itch	blotch	Dutch	catch
blotch	Dutch	catch	match	etch	itch
Dutch	catch	match	etch	itch	blotch
etch	itch	blotch	Dutch	catch	match
catch	match	etch	itch	blotch	Dutch

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INSTANT LETTER RECOGNITION CHART 1					
A	B	C	D	E	F
B	F	D	C	A	E
D	F	E	C	B	A
C	A	B	E	F	D
F	C	A	B	D	E

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**PARTICIPANT NOTE TAKING GUIDE**

**Intonation:**

ABCD? EFG. HI? JKL. MN! OPQR.  
STU? VWXY. Z!

ABC. DEF! G,HIJ? KLMN. OP! Q,RST.  
UV? WXYZ!

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**Birds fly.**

**Birds fly!**

**Birds fly?**

**Children sing.**

**Children sing!**

**Children sing?**

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**Phrasing:**

ABC DE FGH IJ KLM NO PQR ST UVW XY Z

AB CDEF GH IJKL MN OPQR ST UVWX YZ

ABC DEF GHI JKL MNO PQR STU VWX YZ

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**PARTICIPANT NOTE TAKING GUIDE**

**Phrasing Continued:**

1. A fluffy cat chased a little mouse.

2. The hungry baby cried loudly.

3. The frisky kitten quickly scampered up the tree.

4. On the yellow bus, the happy children sang.

5. Micah played the drums and Sasha played a flute.

6. After I finish my homework, I can watch T.V.

**PRACTICE ACTIVITY: PHRASING ACTIVITY**

Jane got new glasses, but she didn't put them on.

She didn't think she looked good in them.

She slipped them into the pocket of her jacket

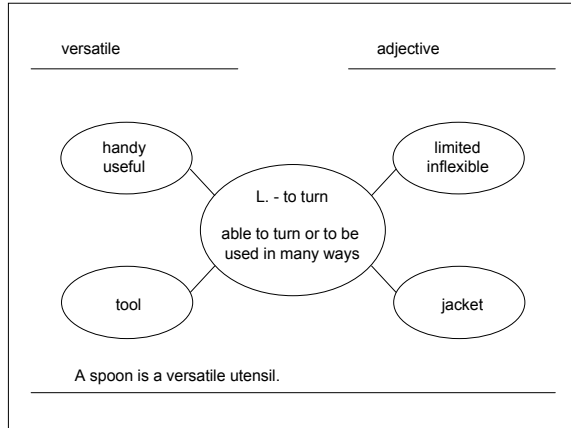
and ran to the park. She hopped and jumped

and just had fun.

**Importance of Vocabulary:**

## PARTICIPANT NOTE TAKING GUIDE

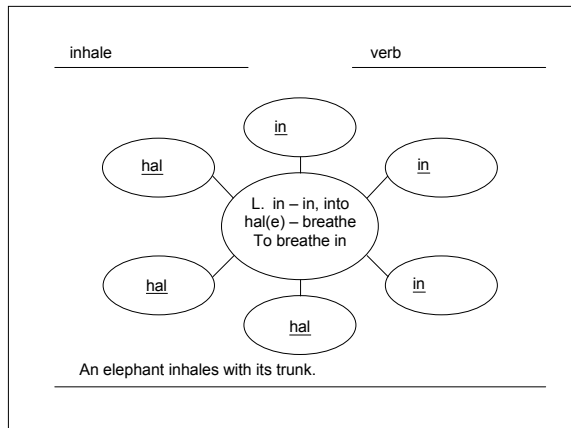
### Semantic Webs:



### Procedure for using the following semantic web:

1. Write the word to be learned on the top left line.
2. Write the part of speech on the top right line and discuss its usage – how it functions.
3. In the center circle, write the origin and definition of the word. Discuss the original meaning and how it compares to the word being learned.
4. In the top left circle write two synonyms for the meaning of the word.
5. In the top right circle write two antonyms for the meaning of the word.
6. In the lower left circle write a noun that can be used with the adjective.
7. In the lower right, write another noun that can be used with the adjective.
8. Write a meaningful sentence using the word learned.

### Derivative Web:




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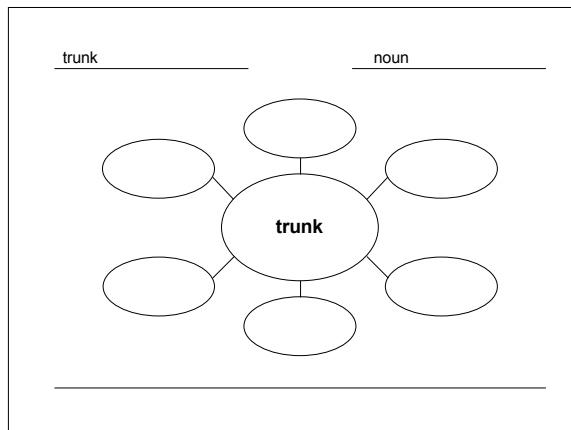
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### Multiple Meaning Web:




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## PRACTICE ACTIVITY: WORD WEBS

**PARTICIPANT NOTE TAKING GUIDE**

**Repeated Oral Reading**

The National Reading Panel concluded that guided oral reading or repeated reading is the most effective technique for improving fluency.

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**Text Reading Levels**

95-100% accuracy – independent level  
90-95% accuracy – instructional level  
Less than 90% accuracy – frustration level

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**Read with a Different Focus**

First reading  
Read with accuracy.

Second Reading  
Read with attention to punctuation and intonation.

Third Reading  
Read with attention to phrasing.

Fourth Reading  
Read as if speaking to a friend.

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**PRACTICE ACTIVITY: DISCUSSION AND REVIEW**

**PARTICIPANT NOTE TAKING GUIDE**

**Measures of Fluency:**

**Calculating Rate**

Individually, each student reads two or three grade-level passages.

Time each student as he or she reads each passage for one minute. Record any errors.

Count the number of words read and subtract the number of errors for each passage. Average the scores for all the passages. This number is the rate and is recorded as words correct per minute (wcpm or cwpm).

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**What Is an Error?**

- A misread word (*ship* instead of *shop*)
- A skipped word
- A substituted word (*steps* instead of *stairs*)
- An inserted word
- Pausing more than 3 seconds on a word
- A self-correction does not count as an error

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**Rates for Oral Reading**

- First grade – 40-60 wcpm (or cwpm)
- Second grade – 90 wcpm
- Third grade – 100 wcpm
- Fourth grade – 110 wcpm
- Fifth grade – 120 wcpm
- Sixth grade and higher – 140-150 wcpm

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PARTICIPANT NOTE TAKING GUIDE

PRACTICE ACTIVITY: THE TWO GRASSHOPPERS

The Two Grasshoppers

Two grasshoppers were searching for a drink of cool water. The summer had been long and hot, and the lakes had all dried up. They were thirsty! Where would they find water?

Finally, the grasshoppers spied a well and hopped to it, hoping to get a drink of cool water.\* They looked down into the deep well. It was quite dark, and they could not tell if there was any water.

They began to argue as to whether or not they should hop in. The one grasshopper said, "We should jump in right away. We will have plenty of water to drink and plenty of water to play in to keep us cool, and we will have it all to ourselves."

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Measuring Fluency

- Find your copy of Comforting Cocoa.
- Start the video.
- Listen to the clip as the student reads for one minute and record any errors.
- Stop the video.
- Calculate the student's WCPM.
- Base on the rate, what instructional techniques would be beneficial?
- Share your results and thoughts with a partner.

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CONCLUSION: KEY POINTS

Reflections:

- Write at least three new pieces of information learned about fluency.
- List activities you have tried with your students to develop fluency.
- List three new activities you plan to use with your students.



## APPENDIX B: SHORT MATRIX

Volume III: Fluency					
Structure of Language	Learner Processes	Teaching Methods	Assessment	Motivation	Linkage to Other Reader Acquisitions
<ul style="list-style-type: none"> <li>Automatic, accurate reading of words</li> <li>Reading of sentences and text with expression</li> <li>Fluency applies to both oral and silent reading</li> </ul>	<ul style="list-style-type: none"> <li>Learner recognizes words by sight accurately, quickly, and automatically</li> <li>Learner efficiently applies needed decoding skills</li> <li>Learner uses syntactic cues to group words in sentences</li> <li>Learner uses all levels of language to aid fluency</li> <li>Difficulty of text influences learner's fluency</li> </ul>	<ul style="list-style-type: none"> <li>Use of oral reading with guidance and feedback – methods include repeated reading, choral reading, paired reading, shared reading, and listening to taped passages</li> <li>Use of independent silent reading although evidence of effectiveness is weak</li> <li>Use of appropriate level text: independent (&gt;90% accuracy); instructional (90-95% accuracy); and frustration (&lt;90%)</li> </ul>	<ul style="list-style-type: none"> <li>Number of words read within a set time limit</li> <li>Text reading rate can be assessed</li> <li>Expected levels with grade level reading: 90 CW/PM (correct words per minute) 2nd grade, 100 CW/PM for 3rd grade 110 CW/PM for 4th grade 120 CW/PM for 5th grade 140 CW/PM for 6th grade and higher</li> <li>Expression can be assessed by rating reading characteristics</li> </ul>	<ul style="list-style-type: none"> <li>Writing riddles, jokes letters, and messages</li> <li>Writing poetry</li> <li>Structuring writing into step-by-step process</li> </ul>	<ul style="list-style-type: none"> <li>Vocabulary, spelling, comprehension, syntax, and handwriting are important acquisitions for constructing text</li> <li>Understanding text for construction facilitates understanding of text for comprehension</li> </ul>

## APPENDIX B: LONG MATRIX

### 1: STRUCTURE OF LANGUAGE

Fluency refers to the rapid, accurate, and expressive rendering of text by a reader. It includes several components: accuracy in decoding; automaticity in word recognition; and the appropriate use of stress, pitch and text phrasing to read with expression.

The basic unit of written language in English is the word. Words are separated by empty spaces in text. Words have conventional spellings so the sequence of letters does not change when they recur. These features make words easy to see and reliable to identify in print.

Whereas words are basic visual units, sentences are the basic units of meaning in texts and are distinguished visually by a capital letter at the beginning of a string of words and a period at the end. Sentences impose structure on words by indicating how the words are related to each other, which are the subject, verb, object, and modifiers, and how these words form clauses and phrases. In English, the order of words signals these relations.

When sentences are read with expression, content words are stressed more than function words. The typical sentence begins with rising intonation and ends with falling intonation. Further variation in stress and pitch depends upon the meaning being expressed. Written marks signaling how sentences are expressed consist of sentence beginnings and endings, commas signaling pauses, question marks signaling a rising intonation, exclamation marks signaling extra stress, and quotation marks signaling that someone is speaking. Except for these, there are no other marks indicating how to read sentences with expression.

### 2: LEARNER PROCESSES

Fluent reading of text applies to both oral and silent reading. Fluent readers are able to recognize words known by sight accurately, quickly, and automatically. They can apply decoding strategies skillfully to identify unknown words. The acquisition of these capabilities has been discussed above.

In addition, fluent readers recognize how words combine to form sentences and what these sentences mean. Figuring out how the words in sentences are related to each other and where the clauses and phrases lie is handled by the linguistic knowledge stored in readers' heads. This knowledge allows them to read with expression by grouping words into phrases that are spoken with varying stress, pitch and rising and falling intonation.

Fluent reading requires competence with all levels of language, including knowledge of words, sentence structure, and meanings. Fluent reading is only possible when readers are given a text at an appropriate level so that most of the words can be read accurately and automatically and the concepts can be understood. Fluency is developed as readers practice reading text and acquire a growing sight vocabulary.

Students' ability to read text fluently is influenced by the difficulty of the text. The rule of thumb is that texts at an independent level are read with 95-100% accuracy; at an instructional level, with 90-95% accuracy; and at a frustration level, below 90% accuracy. Frustration-level texts would not support fluent reading.

### 3: TEACHING METHODS

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Various instructional methods have been used to assist readers in developing fluency. One approach involves giving students practice reading text orally while providing guidance and feedback. This approach includes repeated reading, choral reading, paired reading, shared reading, and reading while listening to tapes. In repeated reading, students practice reading a short, 100-200 word text both orally and silently over a period of several days until accuracy and fluency criteria are met.

These methods have been used mainly for remedial purposes to help struggling readers, but they have also been adapted for use in classrooms. For example, the method of repeated text reading is conducted with students working together as partners listening to each other read and providing feedback. Centers with tape recorders enable students to read along while listening to tape-recorded stories. The oral recitation lesson consists of several steps: first teachers model the reading of a story, then its meaning is discussed, then students echo-read the story with the teacher, then students practice the text individually until it is mastered.

Another approach is to have students engage in independent silent reading. Children are given time to read self-selected books by themselves. Evidence indicating that this method is effective for improving students' reading is weak. In the absence of clear evidence, the method of sustained silent reading does not appear to be the best use of class time.

### 4: ASSESSMENT

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Several measures can be used to obtain a full picture of students' fluency. Word reading speed can be assessed by giving students a list of words they are expected to know by sight and examining how many words they can read in a given period of time, perhaps 45 seconds. Text reading rate can be assessed by giving students a passage at their grade level and scoring how many words they read correctly in one minute. Expected levels are 90 CWPM in 2nd grade, 100 CWPM in 3rd grade, 110 CWPM in 4th grade, 120 CWPM in 5th grade, and 140 CWPM in 6th grade and higher. Expression can be assessed by rating various characteristics of students' oral text reading such as grouping words appropriately into phrases, and varying stress and pitch to reflect the syntactic structure and meaning.

### 5: MOTIVATION

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Motivation to read text is influenced by readers' interest in the content of the text, its difficulty level, and whether reading serves a purpose for the reader.

### 6: LINKAGE TO OTHER READER ACQUISITIONS

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Automatic recognition of words is an essential ingredient for being able to read text fluently. The mind has limited capacity to process information. If the words in text require no attention or effort to recognize, then the mind's processing space can be devoted entirely to understanding the meaning of the text. However, if attention is required to decode the words, then the processing space available for comprehension is reduced or disrupted and constructing the meaning takes longer and may even be impaired.

Comprehending text successfully requires more than just processing words automatically. Words must be grouped into phrases or other meaningful units in accordance with the structure of sentences. Syntactic processing enables readers to connect written text to oral language so that the expressive ingredients of

reading are activated. This enables readers to read with expression, which facilitates comprehending the meaning of the text.

## REFERENCES FOR FLUENCY

- Bowers, P. G., Sunseth, K., & Golden, J. (1999). *The route between rapid naming and reading progress*. Scientific Studies in Reading, 3 (1), 31-53.
- Fisher, P. (1999). Getting up to speed. Perspectives, 25 (2), 12-13.
- Levy, B. A. (2001). *Moving the bottom: Improving reading fluency*. In M. Wolf (Ed.), Time, Fluency and Developmental Dyslexia (357-379). Timonium, Maryland: York Press, Inc.
- Levy, B.A., Bourassa, D.C., & Horn, C. (1999). *Fast and slow namers: Benefits of segmentation and whole word training*. Journal of Experimental Child Psychology, 73, 115-138.
- Levy, B. A., Abello, B., & Lysynchuk, L. (1997). *Beginning word recognition: Benefits of training by segmentation and whole word methods*. Scientific Studies of Reading, 3, 129-157.
- Lovett, M. W., Lacerenza, L., & Borden, S.L. (2000). *Putting struggling readers on the PHAST Track: A program to integrate phonological and strategy-based remedial reading instruction and maximize outcomes*. Journal of Learning Disabilities, 33, 458-476.
- Meyer, M. S., & Felton, R. H. (1999). *Repeated reading to enhance fluency: Old approaches and new directions*. Annals of Dyslexia, 49, 283-306.
- Neuhaus, G. F., & Swank, P. R. (2002). *Understanding the relations between RAN letters subtest components and word reading in first grade students*. Journal of Learning Disabilities, 35 (2).
- Rasinski, T. (2003). *The fluent reader: Oral reading strategies for building word recognition, fluency, and comprehension*. New York: Scholastic.
- Samuels, S. J. (1979, January). *The method of repeated readings*. The Reading Teacher, 32, 403-408.
- Torgesen, J. K., Rashotte, C. A. & Alexander, A. W. *Principles of fluency instruction in reading: Relationships with established empirical outcomes*. In M. Wolf (Ed.), Dyslexia, Fluency and the Brain (pp. 333-355). Timonium, MD: York Press, Inc.
- Wolf, M. (2001). *Dyslexia, fluency, and the brain*. Timonium, MD: York Press.
- Wolf, M., & Katzner-Cohen, T. (2001). *Reading fluency and its intervention*. Scientific Studies in Reading, 5 (3), 211-239.
- Young, A. & Bowers, P. G. (1995). *Individual difference and text difficulty determinants of reading fluency and expressiveness*. Journal of Experimental Child Psychology, 60, 428-454.
- Young, A., Bowers, P. G., & MacKinnon, G. E. (1996). *Effects of prosodic modeling and repeated reading on poor readers' fluency and comprehension*. Applied Psycholinguistics, 17, 59-84.

## MATERIALS FOR INSTRUCTION

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Campbell, K. U. (1998). *Great leaps reading*. Micanopy, FL: Diarmuid, Inc.

Carreker, S. (2003). *Practices for developing accuracy and fluency*. Houston, TX: Neuhaus Education Center.

Ihnot, C. (1989). *Read naturally*. Minneapolis, MN: Read Naturally.

Kurzweil 3000 (1998). Waltham, MA: Kurzweil Education System.

Wolf, M., Miller, L., & Donnelly, K. (2000). *Retrieval, automaticity, vocabulary elaboration, orthography (RAVE-O): A comprehensive, fluency-based reading intervention program*. *Journal of Learning Disabilities*, 33 (4), 375-386.

**APPENDIX C: SUPPORT MATERIALS**

**RAPID WORD RECOGNITION CHART**

what	are	many	what	are
does	there	full	does	there
are	many	what	are	many
there	full	does	there	full
many	what	are	many	what
full	does	there	full	does

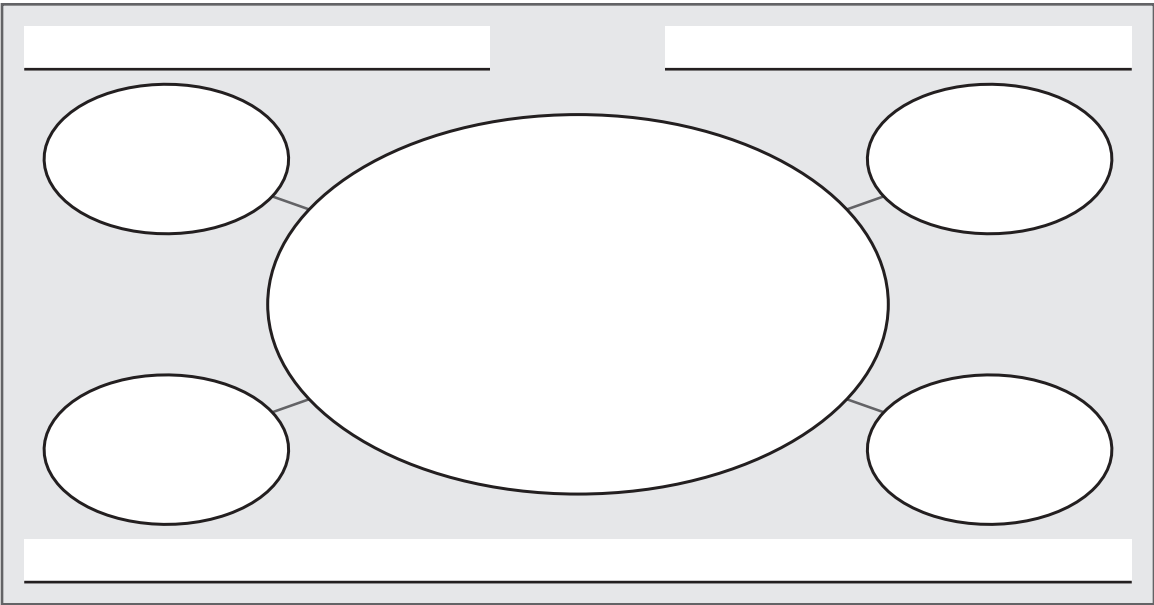
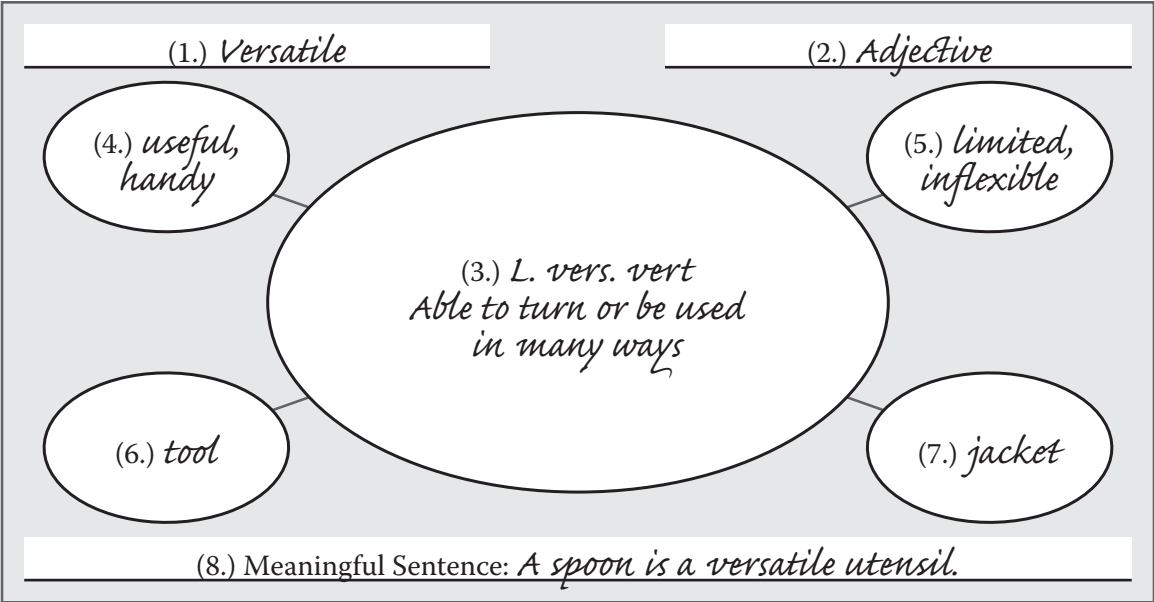
RAPID LETTER RECOGNITION CHART

F	E	A	D	E
E	A	B	F	D
D	C	C	E	B
C	D	E	B	A
B	F	F	A	C
A	B	D	C	F





SEMANTIC WEB



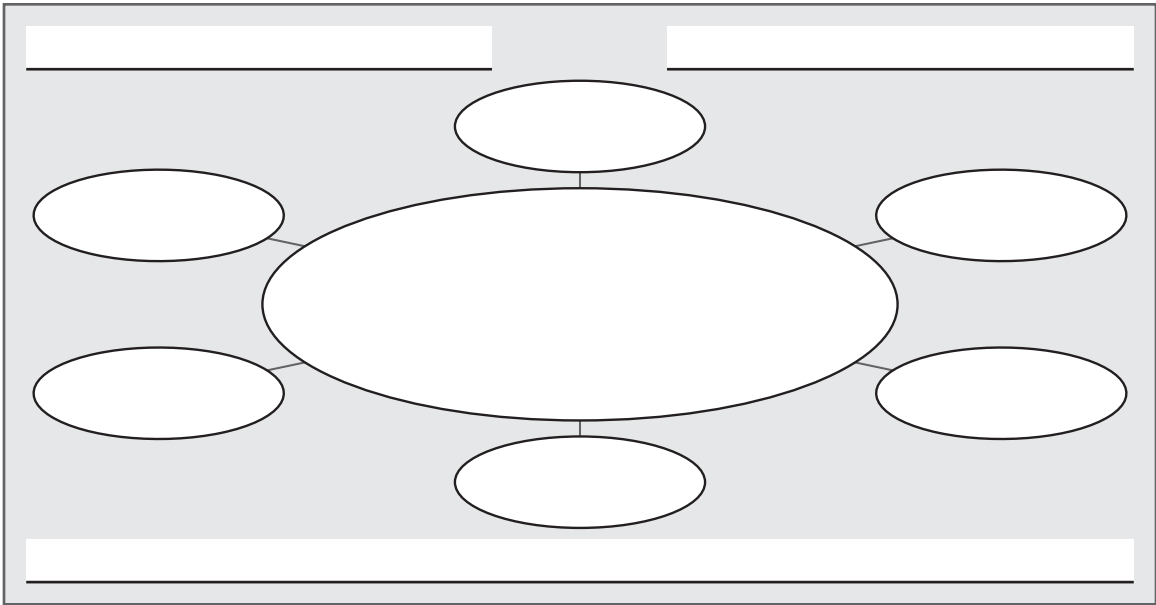
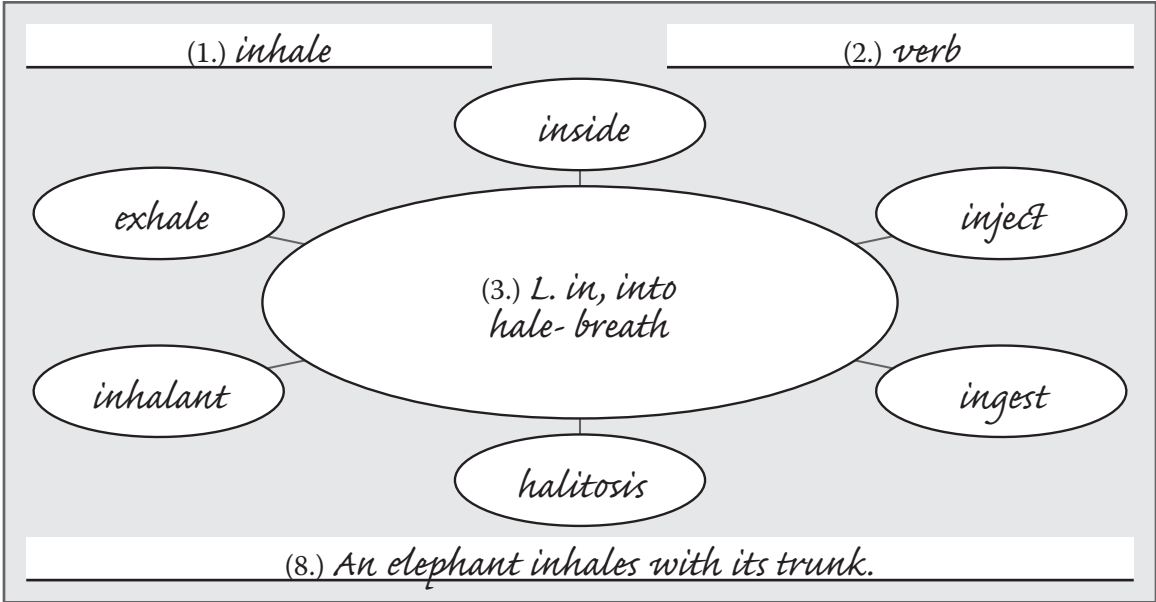
Notes: \_\_\_\_\_

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DERIVATIVE WEB



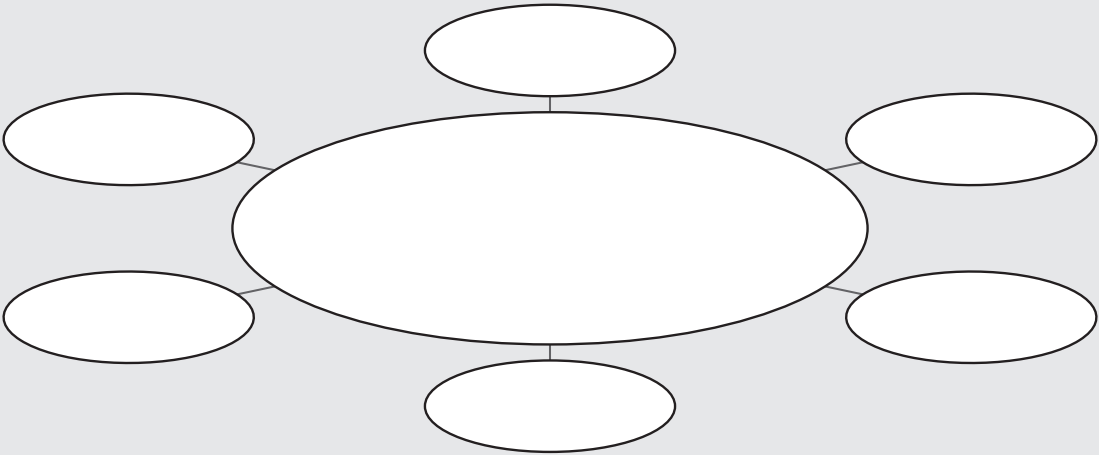
Notes: \_\_\_\_\_

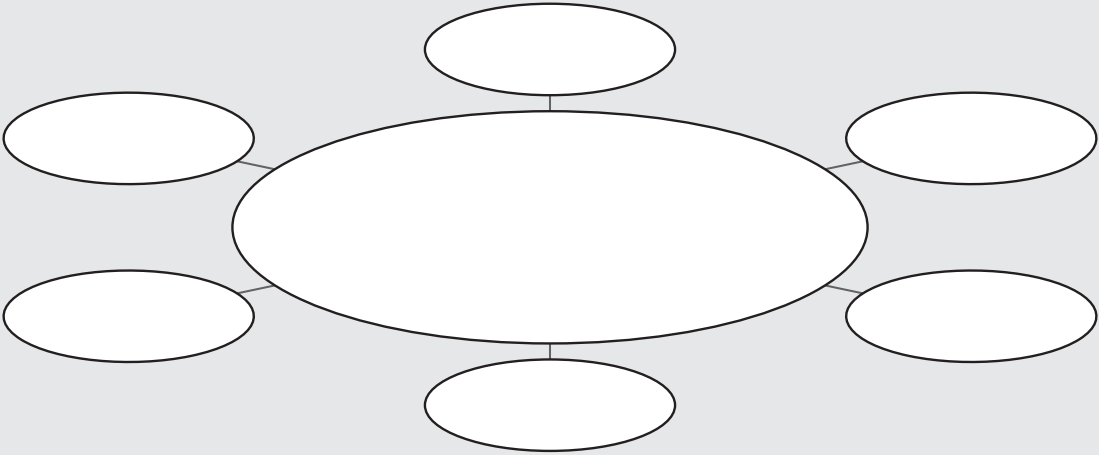
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MULTIPLE MEANING WEB

<i>trunk</i>		<i>noun</i>
 <p>A multiple meaning web diagram for the word "trunk". It features a central oval with six lines radiating outwards to six smaller ovals. The top-left oval is labeled "trunk" and the top-right oval is labeled "noun". The other four ovals are blank. Below the diagram is a long horizontal rectangular box for additional notes.</p>		

 <p>A blank multiple meaning web diagram. It features a central oval with six lines radiating outwards to six smaller ovals. All ovals are blank. Below the diagram is a long horizontal rectangular box for additional notes.</p>		

Notes: \_\_\_\_\_

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\_\_\_\_\_

**PASSAGE #1: THE TWO GRASSHOPPERS — RATE (WCPM) RECORD**

Student/class \_\_\_\_\_ Tester \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_\_ Grade level of text \_\_\_\_\_

**THE TWO GRASSHOPPERS**

Two grasshoppers were searching for a drink of cool water. The summer had been long and hot, and the lakes had all dried up. They were thirsty! Where would they find water?

Finally, the grasshoppers spied a well and hopped to it, hoping to get a drink of cool water. They looked down into the deep well. It was quite dark, and they could not tell if there was any water.

They began to argue as to whether or not they should hop in. The one grasshopper said, “We should jump in right away. We will have plenty of water to drink and plenty of water to play in to keep us cool, and we will have it all to ourselves.”

Errors: \_\_\_\_\_

Misread words: \_\_\_\_\_  
*Example: ship for shop*

Omitted words \_\_\_\_\_

Substituted words: \_\_\_\_\_  
*Example: pretty for beautiful*

Inserted words: \_\_\_\_\_

Pausing for more than 3 seconds: \_\_\_\_\_

Number of words read in one minute: \_\_\_\_\_

Number of errors: \_\_\_\_\_

**PASSAGE #2: COMFORTING COCOA — RATE (WCPM) RECORD**

Student/class \_\_\_\_\_ Tester \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_\_ Grade level of text \_\_\_\_\_

**COMFORTING COCOA**

On a winter day, with your teeth chattering and your body shaking, the most comforting thing in the world is a cup of hot cocoa. It warms your body and makes you forget that it is freezing outside. A cup of steaming hot cocoa is not hard to make. This is how you make it. Pour one cup of milk for each cup of cocoa you wish to make into a pan. Put the pan on the stove and turn the heat on high. Bring the milk to a slight boil. Stir now and then, so the milk will not stick to the bottom of the pan. Just as the milk begins to boil, turn off the heat. Stir in one teaspoon of cocoa powder for each cup of milk. Stir well. Pour the hot cocoa into coffee mugs. Top with a dab of fluffy cream and a cherry. Cheers!

**Errors:** \_\_\_\_\_

Misread words: \_\_\_\_\_  
*Example: ship for shop*

Omitted words \_\_\_\_\_

Substituted words: \_\_\_\_\_  
*Example: pretty for beautiful*

Inserted words: \_\_\_\_\_

Pausing for more than 3 seconds: \_\_\_\_\_

Number of words read in one minute: \_\_\_\_\_

Number of errors: \_\_\_\_\_

CALCULATING WCPM

	Passage #1 (one minute)	Passage #2 (one minute)	Total (two minutes)
# of words read			
# of errors			

Formula

(Total # of words)

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(Total # of errors)

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WCPM

2

Rates for Oral Reading	
First grade:	40- 60 wcpm
Second grade:	90 wcpm
Third grade:	100 wcpm
Fourth grade:	110 wcpm
Fifth Grade:	120 wcpm
Sixth Grade and higher:	140-150 wcpm

# ALASKA READING

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## Volume IV: Comprehension Part 1: Understanding Comprehension

### PARTICIPANT GUIDE

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#### OBJECTIVES

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By the end of this session, participants will be able to identify instructional knowledge that supports reader acquisition in the areas of comprehension.

- Identify the elements of reading that contribute to comprehension. (Structure of Language)
- Review the importance of phonemic awareness, word recognition, fluency and vocabulary as they relate to reading comprehension. (Linkage to Other Reader Acquisition)
- Learn effective comprehension strategies. (Learner Process)
- Learn how reading strategies are used to read. (Teaching Methods)
- Understand the importance of developing worthwhile world knowledge. (Motivation)
- Identify higher order comprehension strategies. (Teaching methods)
- Identify what excellent readers do as they read. (Assessment)
- Understand the long-term development needed in comprehension. (Linkage to Other Reader Acquisitions)

#### VIDEO SUMMARY

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*Note: The following materials contain the same information as the comprehension video.*

In this video, Michael Pressley, Michigan State University, talks about understanding comprehension instruction. Students must listen to text, read text, understand vocabulary and possess higher level thinking skills to be a good reader. All the previous videos concentrated on learning to read. This video concerns reading to learn. Dr. Pressley briefly reviews the other components of reading that affect comprehension. He then discusses different reading strategies and how they are used. He states that comprehension strategy instruction is challenging. Teachers must use many resources and strategies to help students understand what they learn. Our main goal in reading is to have students comprehend what they read.

Components of this video include review of other reading skills as they relate to comprehension, and listening and reading of text.

**BY MICHAEL PRESSLEY, PH.D.**

Michael Pressley  
Michigan State University  
July 2004

- Phonemic awareness (kindergarten)
- Word recognition (phonics at first, primary grades)
- Fluent reading of words (primary grades and on)
- Vocabulary acquisition
- Developing worthwhile world knowledge
- Comprehension Strategies Instruction
- Read, read, read!!

- Not a Hirsch Cultural Knowledge Position (not a trivial pursuit approach)
- Reading worthwhile stuff, watching worthwhile TV
- What knowledge do kids need to know...American history for sure, natural history and science (see the Discovery Channel)
- Five or Six Big Thematic Units a Year--- Themes that Cover Really Critical Content...Stuff that Literate People Know

## Page 8



## PARTICIPANT NOTE-TAKING GUIDE

	<b>Comprehension Strategies</b>
	<ul style="list-style-type: none"> <li>■ Begin By Teaching One, perhaps Prediction Based on Prior Knowledge</li> <li>■ Explain and re-explain the strategy</li> <li>■ Model and re-model the strategy</li> <li>■ Encourage Students to Try</li> <li>■ Scaffold Students to Use the Strategies</li> <li>■ As students begin to use the strategy well and habitually, introduce a second strategy, encouraging students to use both of them</li> </ul>

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	<b>Comprehension Strategies</b>
	<ul style="list-style-type: none"> <li>■ Prediction based on prior knowledge</li> <li>■ Making connections---to prior knowledge, other books, the world</li> <li>■ Ask questions</li> <li>■ Construct images representing ideas in text</li> <li>■ Notice when not comprehending and do something about it (e.g., re-read)</li> <li>■ Summarize</li> <li>■ Interpret/respond to text</li> </ul>

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	<b>Comprehension Strategies Instruction is Challenging</b>
	<ul style="list-style-type: none"> <li>■ Takes time...weeks to a month or more to introduce the first strategy...</li> <li>■ All year to introduce all of the strategies...</li> <li>■ Several years of student practice to get fluent and automatic</li> <li>■ NO BIGGER IMPACT ON READING ACHIEVEMENT!!! IT IS WORTH IT!!</li> </ul>

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**PARTICIPANT NOTE-TAKING GUIDE**

	<b>SOMETHING ELSE!!</b>
	<ul style="list-style-type: none"><li>■ Learning to dialogue about text is most impactful middle school high school language arts skills</li><li>■ As students practice using comprehension strategies in small groups, they are using the processes at the heart of good dialoguing...</li></ul>

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	<b>Dialoguing</b>
	<ul style="list-style-type: none"><li>■ Making predictions</li><li>■ Making connections</li><li>■ Asking questions</li><li>■ Talking about images that come to mind</li><li>■ Talking about what is confusing</li><li>■ Talking about summaries and interpretations</li></ul>

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	<b>Thinking and Talking</b>
	<ul style="list-style-type: none"><li>■ As Students learn comprehension strategies, they are learning to dialogue...Active comprehension is internalized dialoguing!!</li><li>■ How do we know that comprehension strategies are so key? Have excellent readers talk aloud as they read...</li></ul>

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**CLASSROOM MODEL ON DIALOGUING**

**PARTICIPANT NOTE-TAKING GUIDE**

	<b>What Excellent Readers Do As They Read</b>
	<ul style="list-style-type: none"><li>■ Predict</li><li>■ Connect (e.g., make inferences)</li><li>■ Ask questions</li><li>■ Construct images</li><li>■ Seek clarifications when confused</li><li>■ Construct summaries and interpretations</li></ul>

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**PRACTICE ACTIVITY: COMPREHENSION STRATEGIES DISCUSSION**

	<b>Main Goal: Comprehension</b>
	<ul style="list-style-type: none"><li>■ The overarching goal of reading instruction should be developing good comprehenders...Comprehension strategies instruction does that, but it is only part of the story...Word recognition, fluency development, reading good literature about important content, vocabulary development, are all critical!!</li></ul>

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	<b>Main Goal: Comprehension (cont'd)</b>
	<ul style="list-style-type: none"><li>■ But learning to use comprehension strategies is huge...developing ability to tackle text on one's own and developing the oral communications competencies that tell the world that you are a literate person. Comprehension strategies instruction takes years. It is harder and more long term than word recognition skills...and...</li></ul>

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**PARTICIPANT NOTE-TAKING GUIDE**

	<b>Long-Term Development</b>
	<ul style="list-style-type: none"><li>■ Comprehension strategies instruction can and should start in kindergarten (e.g., teacher modeling during read-alouds, teaching students to predict and make up images).....as should word recognition instruction, vocabulary teaching, etc. The only way this can happen is by not letting things get complicated with irrelevancies...like all the irrelevancies in those comprehension strategies professional development books!!</li></ul>

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	<b>One Poster</b>
	<ul style="list-style-type: none"><li>■ In many classrooms, the only printed object pertaining to strategies instruction is one poster listing the strategies!!! You have to make it as easy and clear as possible if you are to succeed in teaching this complicated skill and your students are to succeed in acquiring it!!</li></ul>

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	<b>The Insidious Simple View of Reading</b>
	<ul style="list-style-type: none"><li>■ Comprehension...Oh, let's just take care of the words recognition stuff first!!</li><li>■ So many more experiments on teaching word recognition...must be more valid!!</li><li>■ Just remember...the biggest bump in reading performance comes from learning to use active comprehension strategies!!</li><li>■ Reject Simple View Thinking!!</li></ul>

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**PARTICIPANT NOTE-TAKING GUIDE**

	<b>Read, Read, Read</b>
	<ul style="list-style-type: none"><li>■ Develops fluency</li><li>■ Develops vocabulary (if reading the good stuff)</li><li>■ Develops worthwhile knowledge (if reading the good stuff)</li><li>■ Permits practice of comprehension skills</li><li>■ Builds the habit that typifies literate people!!</li></ul>

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**PRACTICE ACTIVITY: DISCUSSION**

## APP. B: SHORT MATRIX: LISTENING TO TEXT

Volume IV: Comprehension, Part 1: Understanding Comprehension–Listening to Text					
Structure of Language	Learner Processes	Teaching Methods	Assessment	Motivation	Linkage to Other Reader Acquisitions
<ul style="list-style-type: none"> <li>Words</li> <li>Sentences</li> <li>Text</li> </ul>	<ul style="list-style-type: none"> <li>Learner uses processes similar to reading comprehension</li> <li>Word reading and fluency are removed and cannot adversely affect comprehension</li> <li>Learner takes advantage of speaker cues</li> <li>Difference between listening and reading comprehension can indicate reading disability</li> <li>LD/RD students and ELL may require special instruction</li> </ul>	<ul style="list-style-type: none"> <li>Teaching story grammar for narrative text</li> <li>Story retelling of narrative text</li> <li>Teacher activates background knowledge before students listen to expository text</li> <li>Students attend to and identify elements of poetry while listening</li> <li>Teaching rules of conversation to promote discussion</li> <li>Reading to students even after they have learned to read</li> </ul>	<ul style="list-style-type: none"> <li>Teacher-generated questions can be used to assess listening comprehension</li> <li>Students' retelling of a passage without teacher modeling</li> <li>For young children, drawing pictures or ordering pictures demonstrate understanding</li> </ul>	<ul style="list-style-type: none"> <li>Reading high-interest books with vivid pictures to students</li> <li>Reading books that contain information that is familiar to students</li> <li>Reading books that contain vocabulary that matches students' listening vocabulary</li> </ul>	<ul style="list-style-type: none"> <li>Phonological awareness and vocabulary as well as background and syntactic knowledge are important to listening comprehension</li> <li>Listening comprehension is predictive of text reading comprehension</li> </ul>

## APP. B: SHORT MATRIX: READING TEXT

Volume IV: Comprehension, Part 1: Understanding Comprehension Reading Text					
Structure of Language	Learner Processes	Teaching Methods	Assessment	Motivation	Linkage to Other Reader Acquisitions
<ul style="list-style-type: none"> <li>Words</li> <li>Sentences</li> <li>Paragraphs</li> <li>Connected text</li> </ul>	<ul style="list-style-type: none"> <li>Learner uses accurate word reading, fluent reading, vocabulary, working memory, background and syntactic knowledge, inference-making, and monitoring skills</li> <li>Learner states what has been read</li> <li>Most students benefit from comprehension monitoring strategies when reading longer or more complex text</li> <li>Students with LD/RD and ELL may require special instruction</li> </ul>	<ul style="list-style-type: none"> <li>Establishing a purpose for reading</li> <li>Activating background knowledge</li> <li>Teaching text structures – narrative, expository, and poetry</li> <li>Teaching monitoring strategies</li> <li>Students practice applying strategies to their reading</li> <li>Activities that develop vocabulary and background knowledge</li> </ul>	<ul style="list-style-type: none"> <li>Teacher- and student-generated questions can be used to assess comprehension</li> <li>Retelling and summary activities can be used as measurements of comprehension</li> <li>If students have difficulty with comprehension, supporting skills such as word reading, fluency, and listening comprehension should be assessed</li> </ul>	<ul style="list-style-type: none"> <li>Reading high-interest books and books that contain familiar information</li> <li>Reading short passages</li> <li>Reading poetry</li> </ul>	<ul style="list-style-type: none"> <li>Accurate word reading supports comprehension</li> <li>Fluency supports comprehension as attention is available for meaning</li> <li>Vocabulary is vital to comprehension</li> <li>Listening comprehension predicts reading comprehension</li> </ul>

## APPENDIX B:

# LONG MATRIX: LISTENING TO TEXT

### STRUCTURE OF LANGUAGE

Listening comprehension, understanding information at an oral level, is a precursor to reading comprehension. The ability to understand words, sentences, and text at the listening level strongly predicts how well students will understand text that they read.

### LEARNER PROCESSES

The processes needed to understand information at a listening level parallel the processes that are needed for reading comprehension (see Reading Text). The major difference is that the processes for listening comprehension are done at an oral level. The demands of word reading and fluency are removed and cannot adversely affect understanding, and students can take advantage of the speaker's intonation, gestures, and facial features, which convey meaning.

Typically, students with adequate phonological processing, vocabulary, syntactic awareness, concept imagery, and working memory comprehend what is read to them. Students at risk for reading or learning disabilities may experience difficulties with listening comprehension because of inadequate phonological processing, vocabulary, syntactic awareness, concept imagery, and/or working memory and may require special instruction. A significant difference between a student's listening comprehension and reading comprehension is a strong indicator of a reading disability. English language learners may experience some of the same difficulties as students who are at risk for reading or learning disabilities and may require special instruction.

### TEACHING METHODS

Teaching story grammar can enhance students' comprehension of a story that is read to them. Story grammar focuses on the five wh-questions: 1) Who is the story about? 2) When does the story take place? 3) Where does the story take place? 4) What happens? 5) Why does it happen? How the characters feel can also be addressed. The teacher asks children the questions while reading and after reading. These basic questions serve as the foundation for understanding narrative text.

Story retelling is an activity that builds vocabulary and syntactic knowledge and reinforces story grammar. The teacher reads a story. As the teacher reads the story, he or she uses pictures or felt-board forms that represent key characters, places, and events in the story. After reading, the teacher models the retelling of the story, using the pictures or forms as prompts. Students then take turns retelling the story. As children gain proficiency in retelling, the teacher no longer models the retelling of a story.

After teaching students to retell stories using pictures, stimulate their concept imagery by having them describe self-generated, mental pictures that represent characters, places, and events in the story. This will increase their vocabulary, language expression, accurate sequencing, and memory of the story. Ask one student to describe a part of the story. To represent it, place a piece of colored paper on a felt-board or table. Continue until the story is completed. Have each student review his or her piece. Then select one student to retell the whole story. Finally, after they have gone through this process of concep-



tualizing the story, ask wh-questions from above. Vary complexity as needed by imaging single words, single sentences, multiple sentences, and whole paragraphs.

In addition to narrative text, students can listen to expository text and poetry. Before reading expository text, the teacher ascertains prior knowledge or what children know about the topic. The teacher directs students to listen carefully to learn more information about the topic. After listening, children discuss what they have learned about the topic. Before reading a poem, the teacher introduces elements of poetry such as rhyming and repeating words or rhythm and directs students to listen for these elements, which they will discuss after listening to the poem.

Students benefit from discussions of text they have heard. Learning rules of conversation such as starting a conversation, entering a conversation, remaining in a conversation, and taking turns, enriches discussion. The teacher can model how to continue a conversation by asking questions that clarify or extend the topic. Students can practice asking questions about what has been read to them. K-W-L charts, story maps, and other graphic organizers can be used to enhance children's listening comprehension and facilitate discussions.

Students benefit from listening to books even after they have learned to read. Students can listen to books at higher levels of vocabulary and syntax than they are able to read themselves.

## **ASSESSMENT**

Teacher-generated questions and students' retellings that are told without teacher modeling can be used to assess listening comprehension. To demonstrate their listening comprehension proficiency, young children can draw pictures that depict a story or arrange picture cards to show the sequence of events in a story.

## **MOTIVATION**

High-interest books with vivid pictures and books that contain information familiar to the children motivate them to listen. Children at risk for reading or learning disabilities and English language learners are motivated by books that contain vocabulary that matches their listening vocabulary.

## **LINKAGE TO OTHER READER ACQUISITIONS**

Phonological processing and vocabulary as well as background and syntactic knowledge and working memory are important to listening comprehension.

## LONG MATRIX: READING TEXT

### STRUCTURE OF LANGUAGE

Text comprehension, the ability to gain meaning from text, is the ultimate goal of reading. In order to comprehend text, students must acquire knowledge of how to read words and attach meaning to words. They must acquire knowledge of how words are combined into sentences, how sentences are organized into paragraphs, and how paragraphs are arranged into cohesive text to create meaningful information.

### LEARNER PROCESSES

Intact word reading and fluency give the learner access to information in a text. Working memory allows the learner to hold onto the information as the learner's vocabulary and background and syntactic knowledge provide meaning. Information not directly stated in the text (word meanings, author's message) is inferred by the learner. Throughout the process, the learner monitors what is understood, what is not understood, and what must be done to repair what is not understood. In the end, the learner can state the information that has been gained from reading the text.

Typically, students with adequate listening comprehension, word reading skills, and fluency comprehend what they read. Most students benefit from the introduction of metacognitive or monitoring strategies as they encounter longer and more complex text. Students with reading disabilities may experience difficulties with comprehension because of inadequate word reading skills, fluency, listening comprehension, background knowledge, working memory, and/or monitoring abilities, and may require special instruction. English language learners may experience some of the same difficulties as students with reading or learning disabilities and may require special instruction.

Stimulating mental/concept imagery is a good way to increase comprehension. Good readers often form mental pictures, or images, as they read. Readers who visualize during reading understand and remember what they read better than readers who do not visualize. Students can be stimulated to image the words, phrases, and sentences they read. Self-generating images and describing them is more powerful than describing pictures. Suspect concept imagery problems in children with weakness in both oral and written language comprehension.

### TEACHING METHODS

The purpose of comprehension instruction is to enable students to be purposeful and active when they read, so they can derive as much meaning from a text as possible, whether reading for pleasure or for academic learning. Even young children can be taught to be purposeful and active when listening to books and eventually when they are reading books.

Before reading a text, a purpose for reading can be stated. Background or prior knowledge can be activated by previewing the title and any pictures in the text and by discussing the content of the text. A K-W-L chart, for example, can be used to record what students already know about the content and what they want to learn about the content. When they finish reading the text, they can record what they have learned. New vocabulary and concepts can be taught before students read the text. It is not necessary to introduce all unfamiliar vocabulary before students read. Only key words that will add to

students' understanding of the text and have a high probability of reoccurring in other text the students will read need to be introduced.

Students benefit from understanding the structure of the text they are reading. Narrative text will tell a story and will usually include characters, a setting, a problem, a sequence of events, and a resolution of the problem. Expository text provides information and is organized around a subject (what the text is mostly about), a main idea (the subject and what the text tells about the subject), supporting ideas, and details. Rhetorical style of expository text refers to descriptive, sequential, and argumentative/persuasive types of text. Story maps and graphic organizers can help students learn to recognize the structures of narrative and expository text. The structure and elements of poetry such as rhythm and measure and the use of rhyming and repeating words and figurative language can be taught to students.

A variety of strategies that encourage students to monitor comprehension as they read should be taught. These strategies might include confirming, summarizing, and asking questions about what has been read in a text and predicting what will happen next in the text. Students might complete a story map or graphic organizer as they read. The teacher models how to use monitoring strategies and provides practice that allows children to learn how to apply the strategies to their reading.

Students can practice strategies independently or work with a partner or in a small group. The teacher also models how to repair what is not understood. For example, rereading a sentence or looking up an unknown word in the dictionary may ensure comprehension.

Activities that develop students' vocabulary and background and syntactic knowledge are necessary complements to comprehension instruction. Activities such as field trips, guest speakers, listening to books, reading books, and watching videos followed by enriching discussion help build vocabulary, background knowledge, and awareness of syntax.

## **ASSESSMENT**

Simple (on the page) and complex (beyond the page) teacher- and student-generated questions, story retelling, and written summaries can be used to assess students' comprehension of text. For students who experience difficulties with comprehension, assessment of comprehension should include measures of phonological awareness, rapid naming, word reading, fluency, and listening comprehension.

## **MOTIVATION**

High-interest books and books that contain information familiar to students are used to motivate them to read and to apply monitoring strategies. Short passages can be used to illustrate the structures of narrative and expository text. Reading poetry is motivating to students with reading or learning disabilities.

## **LINKAGE TO OTHER READER ACQUISITIONS**

Accurate word reading and adequate fluency are important for the acquisition of comprehension so that attention is not diverted from the meaning of the text. Vocabulary is particularly vital to comprehension. Listening comprehension is predictive of text level comprehension.

## REFERENCES FOR COMPREHENSION

- Beck, I.L., & McKeown, M.G. (2001). *Text talk: Capturing the benefits of read-aloud experiences for young children*. The Reading Teacher, 55:10-20.
- Block, C. & Pressley, M. (Eds.). (2002). *Comprehension Instruction: Research-Based Best Practices*. New York: Guilford.
- Carlisle, J. F., & Riuce, M. S. (2002). *Improving reading comprehension: Research-based principles and practices*. Baltimore: York Press.
- Chambliss, M. J., & Calfee, R. C. (1998). *Textbooks for learning: Nurturing children's minds*. Malden, MA: Blackwell Publishers.
- Idol, L. & Croll, V.J. (1987). *Story-mapping training as a means of improving reading comprehension*. Learning Disabilities Quarterly, 10, 214-29.
- Juel, C. (1988). *Learning to read and write: A longitudinal student of 54 children from first through fourth grades*. Journal of Educational Psychology, 80, 437-47.
- Maria, K. (1990). *Reading comprehension instruction: Issues and strategies*. Timonium, MD: York Press.
- Mezynski, K. (1983). *Issues concerning the acquisition of knowledge: Effects of vocabulary training on reading comprehension*. Review of educational Research, 53, 253-79.
- Palinscar, A.S. & Brown, A.L. (1988). *Teaching and practicing thinking skills to promote comprehension in the context of group problem-solving*. Remedial and Special Education, 9, 53-59.
- Pressley, M. (2000). *Comprehension instruction in elementary school: A quarter-century of research progress*. In B.M. Taylor, M.F. Graves, and P. van den Broek (Eds.), *Reading for Meaning: Fostering Comprehension in the Middle Grade.*, Newark: DE: International Reading Association.
- Pressley, M. (2000). *What should comprehension instruction be the instruction of? A reaction to Slavin and Klein*. In M. Kamil, P.B. Mosenthal, P.D., and R. Barr (Eds.), *Handbook of Reading Research*, Vol. 3. Mahwah, NJ: Lawrence Erlbaum.
- Pressley, M., Johnson, C.J., Symone, S., McGoldrick, J.A., & Kurita, J.A. (1989). *Strategies that improve children's memory and comprehension of text*. The Elementary School Journal, 90, 30-32.
- Scarborough, H. S. (2001). *Connecting early language and literacy to later reading (dis)abilities: Evidence, theory, and practice*. In S.B. Neuman, and D.K. Dickinson (Eds.), *Handbook of Early Literacy Research*. New York: Guilford Press.
- Stahl, S.A., Hare, V.C., Sinatra, R., & Gregory, J.F. (1991). *Defining the role of prior knowledge and vocabulary in reading comprehension: The retiring of number 41*. Journal of Reading Behavior, 23, 487-508.
- Strict, T.G. & James, J.H. (1984). *Listening and reading*. In P.D. Pearson (Ed.), *Handbook of Reading Research*. New York: Longman.
- Taylor, B.M., Frye B.J., & Maruyama, G.M. (1990). *Time spent reading and reading growth*. American Educational Research Journal, 27, 351-62.
- Tunmer, W.E., Herriman, M.L. & Nesdale, A.R. (1988). *Metalinguistic abilities and beginning reading*.

Reading Research Quarterly, 23, 134-58.

Whitehurst, G.J., & Lonigan, C.J. (2001) *Emergent literacy: Development from prereaders to readers*. In S.B. Neuman, and D.K. Dickinson (Eds.), *Handbook of Early Literacy Research*. New York: Guilford Press.

## MATERIALS FOR INSTRUCTION

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Carlisle, J. (1983). *Reasoning and reading*. Cambridge, MA: Educators Publishing Service.

Carlisle, J. (1987). *Beginning paragraph meaning: Beginning reasoning and reading*. Cambridge, MA: Educators Publishing Service.

Carreker, S. (1998). *The colors and shapes of language: Developing oral language and listening comprehension*. Houston, TX: Neuhaus Education Center.

Carreker, S. (2004). *Developing metacognitive skills: Vocabulary and comprehension*. Houston, TX: Neuhaus Education Center.

Ervin, J. (1993) *Early reading comprehension in varied subject areas and reading comprehension in varied subject matter*. Cambridge, MA: Educators Publishing Service.

Greene, V.E., & Enfield, M.L. (1987). *Report form comprehension guide*. Bloomington, MN: Language Circle Enterprises.

Greene, V.E., & Enfield, M.L. (1987). *Story form comprehension guide*. Bloomington, MN: Language Circle Enterprises.

Pauk, W. (2000). *Six-way paragraphs*. Chicago, IL: Jamestown Publishers.

Smith, M.T., & Hogan, E.A. (1991). *Teaching a process for comprehension and composition*. Forney, TX: EDMAR Educational Associates.

# ALASKA READING

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## Volume IV: Comprehension Part 2: Vocabulary

### PARTICIPANT GUIDE

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#### OBJECTIVES

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By the end of this session, participants will be able to identify instructional knowledge that supports reader acquisition in the areas of vocabulary development K-12.

- Participants will understand the latest research results in vocabulary development and its affect on academic success. (Learner Process)
- Participants will identify the relationship between vocabulary and reading comprehension. (Linkage to Other Reader Acquisitions)
- Participants will understand how children learn words. (Learner Process)
- Participants will better understand vocabulary development in students. (Learner Process)
- Participants will be able to model ways to narrow the gap by reading to students. (Teaching Methods)
- Participants will understand how to narrow the gap by increasing the amount of reading time. (Teaching Methods)
- Participants will learn how to narrow the gap by increasing word consciousness with students. (Teaching Methods)
- Participants will identify how to narrow the gap by using productive means of teaching new word meaning. (Teaching Methods)
- Participants will identify the principles of vocabulary instruction. (Learner Process)

#### VIDEO SUMMARY

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Note: The following materials contain the same information as the vocabulary video. It is included to help the facilitator better understand the content.

Katherine A. Dougherty Stahl, University of Illinois at Urbana-Champaign, discusses the importance of fostering vocabulary development early in life. Children learn vocabulary indirectly and through explicit instruction. Mrs. Stahl discusses the latest research findings and demonstrates how we as teachers can narrow the gap for students in the area of vocabulary acquisition. Important concepts stressed are reading to children, the effectiveness of getting students with difficulties to increase amount of reading, how to increase word consciousness, and the productive means of teaching new word meanings.

BY KAY STAHL, MA-ED

## WHAT THE RESEARCH SAYS:

- Vocabulary knowledge = reading achievement
- Expose children to word meanings.

## STUDY BY HART &amp; RISLEY

Longitudinal study of 42 families began in 1982 when the children were 7 months old. These were healthy families from professional, working class, and assisted economic backgrounds. They studied the amount of talk going on in the families. They found that:

- The amount of parent talk differs greatly between families
- Family talk was consistent over time.
- Differences mount over time
- The amount of talk was generally correlated with economic status.
- By age 3, the range in expression was 200 w/hr, 400 w/hr
- By age 4, children of the most talkative families will accumulate over 70 million words of receptive and expressive language experience compared to children of most taciturn families with 18 million.

## STUDY OF RELATIONSHIP BETWEEN VOCABULARY AND READING COMPREHENSION

1. The General Aptitude Hypothesis states that Vocabulary knowledge is the strongest predictor of general IQ.
2. The General Aptitude Hypothesis states that Vocabulary reflects knowledge of the world.
3. The Instrumentalist Hypothesis states that knowing more words facilitates comprehension.
  - One estimate found that “Printed School English” (all words in text books), contains roughly 88,000 word families
  - The average child, by the end of high school may know about 45,000 words.
  - Several studies have determined that students learn about 1,000 root words per year, or 3,000 words per year

## WHERE DO WORDS COME FROM?

- Teaching 6-12 words per week =400/year
- About a fifth grade level, 150 wpm/60min/day for 5 days/week= 2,250,000 words read
- 45,000-112,500 unknown
- Learn 5-10% of previously unknown words in single reading= 2,250



## PARTICIPANT NOTE TAKING GUIDE

### How do children learn words?

- Direct Instruction
  - Estimates are that teachers can directly teach between 300 and 600 words per year.
- Indirect Instruction
  - Estimates are that children can learn about 3000 words per year from listening and reading in context.
  - The teacher still plays a role in creating experiences and guiding discovery.
- You need both instruction and context, but context provides many more word meanings.

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### Matthew Effects

- Children with reading problems read less text and less challenging text than proficient readers.
- The result is that the vocabulary gap between children with reading problems and proficient readers grows wider each year.

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## PRACTICE ACTIVITY: REFLECTIONS

### How do we narrow the gap?

- Read to children.
- Increase the amount of reading that children with reading problems do.
- Increase word consciousness.
- Use productive means of teaching new word meanings.

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**PARTICIPANT NOTE-TAKING GUIDE**

**Reading to children can improve their vocabulary**

- One study found a 6% gain in vocabulary from listening to stories, similar to that found in reading
- Reading to children can be a means of increasing the world knowledge of children with reading problems
- Reading to should not take the place of having children practice reading

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**NRP Findings**

- Storybook reading helped teach children the meanings of unfamiliar words.
- Older children and children with larger vocabularies learned more words.
- The frequency of the target word influenced the occurrence of the word in the child’s retellings.

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**Text Talk**  
(Beck & McKeown, 2001)

- Selection of complex texts
- Limiting elaborations of background knowledge
- Open-ended initiating and follow-up questions during and after reading
- Judicious use of pictures
- Vocabulary work after reading

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**PARTICIPANT NOTE-TAKING GUIDE**

**Vocabulary Development**

- Choose high-utility, “Tier Two” words for development.
- Tier Two words are used by mature language users, words not limited to a specific domain (Tier 3) nor basic oral vocabulary (Tier 1).
- Children already have the concept, but not the word for Tier Two words.

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**Vocabulary Development Routine**

- Describe word use in the story.
- Explain the word’s meaning and give a few examples of general use.
- Elicit examples of word use from the students.
- Follow-up with a Word Wizard chart.

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**PRACTICE ACTIVITY: TIER-TWO WORDS**



**Word Wizard 1**

- Approximately 10-20 words from read-alouds or WOW are placed on an incentive chart.
- Students receive a check by their name each time they use word in speaking or writing.
- At the end of the week, the students that have the most checks become the Word Wizards.

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**PRACTICE ACTIVITY: VOCABULARY ROUTINE**

**PARTICIPANT NOTE-TAKING GUIDE**

### How do we narrow the gap?

- Read to children.
- Increase the amount of reading that children with reading problems do.
- Increase word consciousness.
- Use productive means of teaching new word meanings.

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### Increase the amount of reading that children do



- Push children to read more challenging text.
- Provide support to children in reading more difficult texts.
  - Repeated reading
  - Assisted reading
  - Echo reading

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### Video Clip of Echo Reading

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PARTICIPANT NOTE-TAKING GUIDE

Story Impressions

- Before reading, the teacher lists 10-20 phrases from text sequentially.
- In dyads or triads, students predict what the story will be about and create it collaboratively in writing.
- The created story is shared with the class.
- The class reads the story and discusses it.

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PRACTICE ACTIVITY: STORY IMPRESSIONS (FLU)

NRP Findings Related To Less Able Readers

- Older students are able to learn vocabulary from listening.
- Concrete words learned more easily than less imageable words.
- Directly teaching (4th grade) students how to derive meaning from context was most beneficial for poor readers.

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Teaching About Context Clues  
(Blachowicz & Fisher, 2002)

- Why and when to use context
- Kinds of context clues
- How to find and use available context clues
- Have students collect, explain and display examples of context clues.

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**PARTICIPANT NOTE-TAKING GUIDE**

**Kinds of Context Clues**

- Synonyms
- What a word is or is not like
- Kind of thing or action it is
- What a word is used for
- How something is done
- General topic, idea, or setting related to word

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**PRACTICE ACTIVITY: DISCUSS READING STRATEGIES**

**How do we narrow the gap?**

- Read to children.
- Increase the amount of reading that children with reading problems do.
- Increase word consciousness.
- Use productive means of teaching new word meanings.

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**Word of the Week (WOW)**

- Students recorded an interesting word in their vocabulary notebook that they had encountered
- Recorded context, meaning, new sentence
- Shared with class
- Placed on Word Wizard Chart

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## PARTICIPANT NOTE-TAKING GUIDE

### Vocabulary Word Walls

- Words encountered during read-alouds, choice text reading, WOW (Word of the Week), or other “word consciousness” activities.
- Used in conjunction with Text Talk and Word Wizard.
- In my classroom, these words were put on pieces of oaktag sentence strips on closets.

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### Word Wizard 2



- Teacher or children pick “school” words
- When children hear or see words, they tell teacher
- Teacher puts a Post-It™ note after child’s name
- When children get 5 Post-its, they are Word Wizard

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### Sponge Activities that Enhance Word Consciousness

- Possible Sentences
- Vocabulary WW tic-tac-toe
- Word Clusters
  - Restaurant words, baseball words, animal babies
- Synonym Lists
  - Ways to say walk/move, talk, eat, sleep

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**PARTICIPANT NOTE-TAKING GUIDE**

### Possible Sentences

- Take about 6 words from a text to be read.  
Add 4 already known words
  - Mammals, ocean, krill, blowhole, baleen,
  - Breech, large, killer, swim, eat
- Have children make sentences which contain at least 2 of these words.

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**PRACTICE ACTIVITY: REFLECTIONS**

### Possible Sentences

- Have children read the story
- After reading, have children discuss the sentences and whether they would be true given what they read.

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### Word Play Increases Word Consciousness

- Puzzles
- Word Games
- Computer activities and websites
- Word calendars
- Riddles
- Puns

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**PRACTICE ACTIVITY: INCREASING WORD CONSCIOUSNESS**

**PARTICIPANT NOTE-TAKING GUIDE**

**How do we narrow the gap?**

- Read to children.
- Increase the amount of reading that children with reading problems do.
- Increase word consciousness.
- Use productive means of teaching new word meanings.

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**What does it mean to know a word?**

- Let's smoke a salmon.
- The chimney is smoking.
- He smoked a cigarette.
- The psychologist smoked a pipe.
- The hippie smoked marijuana.
- The teenager smoked his first cigarette.

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**Three principles of effective vocabulary instruction**

- Include both definitional and contextual information
- Have children actively process the information
- Provide multiple exposures

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## PARTICIPANT NOTE-TAKING GUIDE

### Definitional and Contextual Information

- Definitional Information
  - Relation of word with other words
    - Synonym, antonym, category, description
    - Children need explicit instruction to understand definitions
    - Easy-to-use dictionaries, such as the COBUILD Dictionary

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### Providing Definitional Knowledge

- Synonyms
- Antonyms
- Restating a definition in your own words
- How are 2 words similar? How are two words different?

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### Synonyms

- Words that mean \_\_\_\_\_
  - Walk (stroll, skip, run, waddle, saunter, hike, march)
  - Talk (whisper, speak, announce, converse, yell)
  - Eat (chew, gobble, sip, nibble, dine, devour)
  - Sleep (nap, rest, snore, shut-eye, siesta, doze off, trance)

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## PRACTICE ACTIVITY: PRODUCTIVE USE OF DICTIONARY

## PARTICIPANT NOTE-TAKING GUIDE

### Making Dictionary Use Productive

(Blachowicz & Fisher, 2002)

- Knowing when to use a dictionary
- Knowing how to locate a word
- Knowing the parts of a dictionary entry
- Choosing between multiple meanings
- Applying the meaning

### Knowing when to use a dictionary

- Understanding components of definition: category and how word differs from other members of category
- Teaching activities: concept map, group activities (Oxford Dictionary WOTD), rewrite definitions

### Knowing how to locate a word

- Alphabetization
- Make student dictionaries (small groups)
- Guide Words: Use isolated exercises with caution; Instead use real dictionaries in whole class activity

## PARTICIPANT NOTE-TAKING GUIDE

### Knowing the parts of a dictionary entry

- Troublesome: weak differentiation, vague language, likely interpretation (erode), disjointed definitions (McKeown, 1990)
- Teach components of definition
- Class-made dictionaries

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### Choosing between multiple meanings

- Cross-checking context and definitions is required.
- PAVE
  - Write the sentence in text.
  - Predict meaning and write an original sentence.
  - Verifying dictionary; write definition.
  - Evaluate and rewrite original sentence.
  - Associate with an image.

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### Applying the meaning

- May still be difficult, especially for idioms
- Use teacher and student think-alouds

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**PARTICIPANT NOTE-TAKING GUIDE**

**Definitional Information is not enough**



- Smoke (v.t. to inhale burning matter)
- The same word means something different in different contexts.

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**Providing Contextual Knowledge**



- Generating sentences
  - Make sure the sentences really tell about the word
- Generating scenarios
- Silly questions
- Describe, draw
- Possible sentences

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**Increasing productivity by teaching word parts**



- Prefixes and roots account for a large portion of the growth of word meaning between grades 3 and 5.
- Teaching word parts can dramatically increase children’s word knowledge

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**PARTICIPANT NOTE-TAKING GUIDE**

**Some Prefix Activities**

- Making new words
  - Not blue = unblue
  - Not cola = uncola
- Word sorts
- Word webs

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**Content areas are a rich source of new words and concepts.**

- Content areas contain vocabulary that require new, richer understandings.
- Content area vocabulary requires concept development.

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## PARTICIPANT NOTE-TAKING GUIDE

### Complex Concepts

- Need to provide classification, description, examples, and non-examples
- Need to “criss-cross” the landscape, viewing concept from different angles.
- Need to put concept into multiple contexts.

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### Vocabulary Recognition Task (Stahl, 2003)

- Create a list of words related to the unit concepts.
- Add a proportion of foils.
- Students circle words that they can read and are certain have something to do with the unit. Pretest and posttest the list.
- At posttest, students also web the words.

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### VRT Scoring Procedures

- Score 1 point for each word correctly circled, deduct 1 point for each foil selected.

OR

- Use a proportional scoring method. For example, 18/25 correct-  $1/8 =$  score.

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PARTICIPANT NOTE-TAKING GUIDE

Semantic Methods

- Semantic Mapping
- Semantic Feature Analysis
- Teaching words in semantic groups

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Semantic Mapping

- Brainstorm words that go with a central concept
  - Write on board
  - Add words to be taught, discussing as you go
- Create a map, linking concepts to categories
- Transferred to a bulletin board, this becomes a Word Wall for students to refer to throughout the unit.

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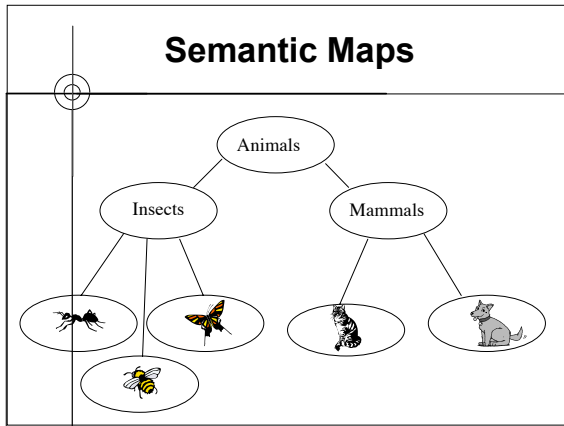
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## PARTICIPANT NOTE-TAKING GUIDE




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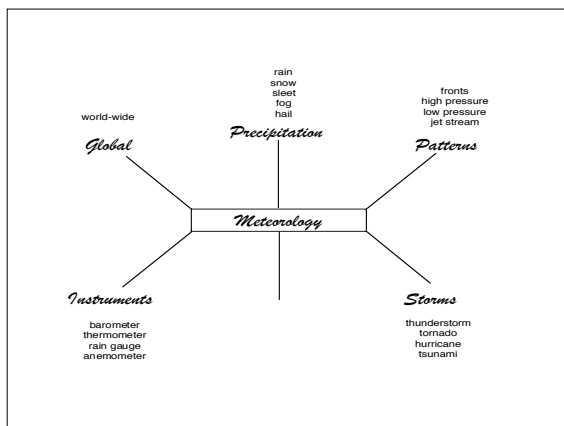
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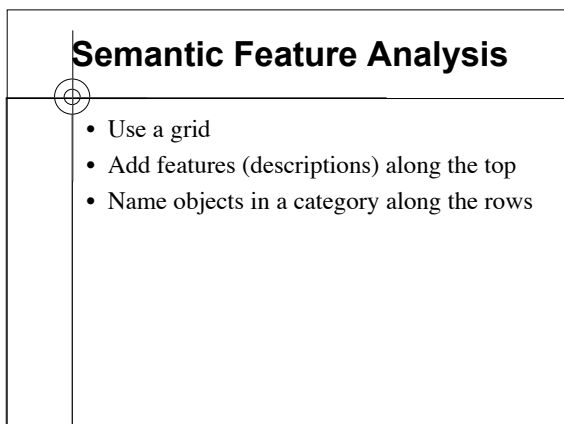
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PARTICIPANT NOTE-TAKING GUIDE

	2 wheeled	4 wheeled	Land	Sea	Air	
bicycle	+	-	+	-	-	
Airplane	-	-	-	-	+	
Velocepede	+	-	+	-	-	
biplane	-	-	-	-	+	
cruiser						

Teaching words in semantic groups




- Bad People
  - Villain
  - Malefactor
  - Burglar
  - Embezzler
  - Miscreant
  - Cad
  - Rogue
  - Scoundrel
- Red
  - Crimson
  - Scarlet
  - Pink
  - Blush
  - Ruby
  - Carmine
  - Sanguine




Making distinctions

- How is a villain like an embezzler? How are they different?
- How is crimson like scarlet? How are they different?

**PARTICIPANT NOTE-TAKING GUIDE**

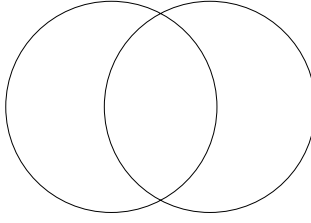
### Venn diagrams





Things that fly

Insects



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### Concept Map

What is it?

Examples

Non-Examples

What is it like?

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### Concept Map

machine

What is it?

Examples



Non-Examples

What is it like?

Screen, Keyboard, CPU  
Used for drawing, writing

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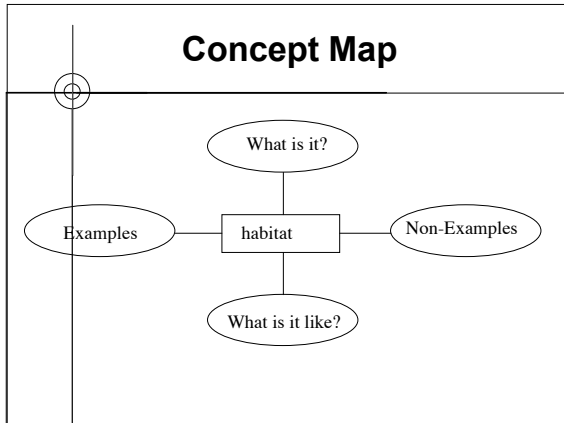
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## PARTICIPANT NOTE-TAKING GUIDE



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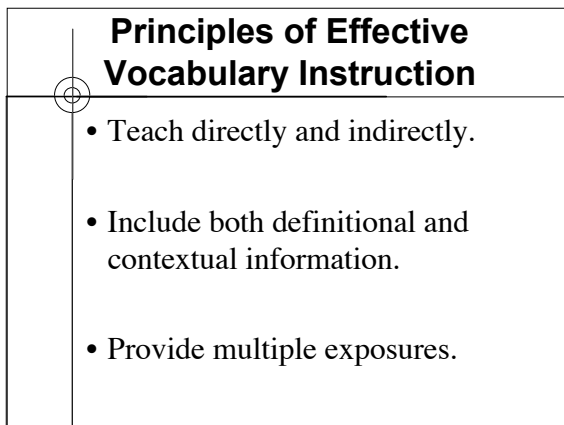
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### PRACTICE ACTIVITY: CONCEPT MAPS



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### ASSIGNMENT/ASSESSMENT

## APPENDIX B: SHORT MATRIX

Volume IV: Comprehension, Part 2: Vocabulary					
Structure of Language	Learner Processes	Teaching Methods	Assessment	Motivation	Linkage to Other Reader Acquisitions
<ul style="list-style-type: none"> <li>• Words – meanings and usages</li> <li>• Word parts – prefixes, roots, combining forms, and suffixes</li> </ul>	<ul style="list-style-type: none"> <li>• Learner uses semantic and syntactic knowledge, working memory, inference-making, social interaction cues, morphological knowledge, phonological processing and accurate word reading</li> <li>• Students typically learn vocabulary indirectly; may need direct instruction for specific words</li> <li>• Students with LD/RD may require special instruction</li> <li>• ELL may require special instruction</li> </ul>	<ul style="list-style-type: none"> <li>• Indirect and explicit instruction of individual words and word-learning strategies—use context cues and the use of reference materials</li> <li>• Indirect and explicit teaching of morphology – affixes, roots, and combining forms</li> <li>• Indirect and explicit teaching of syntax – parts of speech and functions of words in sentences</li> </ul>	<ul style="list-style-type: none"> <li>• Vocabulary can be assessed with word sorts, in which students rearrange words on cards into logical categories</li> <li>• Students list words that are related to a target word</li> <li>• Teacher-developed vocabulary assessments</li> <li>• Standardized vocabulary assessments</li> </ul>	<ul style="list-style-type: none"> <li>• Word sorts, semantic map and webs</li> <li>• Learning word origins</li> <li>• Learning puns, jokes, riddles</li> <li>• High-interest books</li> </ul>	<ul style="list-style-type: none"> <li>• Vocabulary supports decoding as students are better able to read words they know</li> <li>• Vocabulary supports comprehension as students need to know most words in a text to understand it</li> <li>• Vocabulary supports composition</li> </ul>

## **APPENDIX B: LONG MATRIX**

### **1. STRUCTURE OF LANGUAGE**

Words are used to communicate. Words that are understood in listening and reading comprise students' receptive vocabulary. Words that are used in speaking and writing comprise students' expressive or productive vocabulary. Students must understand the meanings and the possibilities and confines of the usages of words as they listen to and read words and as they speak and write words.

### **2. LEARNER PROCESSES**

To learn new vocabulary, the learner must coordinate the semantic and syntactic functions of a word with the contextual aspects of its meaning and usage. In other words, the learner must understand what a word means and how it is used (or not used) in a given situation. For example, home can be used as a noun and mean "a dwelling," but in the context of baseball, the word home may be used as something other than a noun and with a meaning other than "a dwelling" as in slide home or home team. When the learner is learning new vocabulary through listening or reading, working memory is required for the learner to process words and their context and to infer any meaning that is not directly taught or stated. At the listening level, the learner is able to support an inferred meaning by taking advantage of social interaction cues (the speaker's intonation, gestures, and facial expressions) that are unavailable in print. Knowledge of morphology (meaning units within words) aids the understanding of the meaning of an unfamiliar word. Intact phonological processing at the listening level and accurate word reading at the text level ensure the proper identification of a word to which the learner matches meaning.

Children typically acquire most of their vocabulary indirectly through listening, conversation, and reading. Specific content vocabulary may require explicit instruction. Children at risk for reading or learning disabilities may arrive at school with limited vocabulary and may exhibit difficulties with word retrieval, multiple meanings, and figurative language. They may need deliberate opportunities for learning words indirectly and additional explicit instruction. English language learners may demonstrate limited vocabulary and difficulties with word retrieval, multiple meanings, figurative language, word order, and word usage. They may require special instruction.

### **3. TEACHING METHODS**

Vocabulary is taught both explicitly and indirectly. Given the vast amount of vocabulary that needs to be learned, it is insufficient for children to learn all vocabulary through explicit instruction. Children learn vocabulary indirectly through listening, reading, and actively engaging in activities that require meaningful and extended use of vocabulary. It is important for the teacher to provide opportunities for the indirect and incidental learning of vocabulary. For young children, songs, rhymes, finger plays, dramatic play, listening to books, retelling stories, picture sorts, naming of objects, and enriching conversation provide opportunities for vocabulary learning. As children begin to read and spell, reading and listening to books and performing activities such as listing words related to a topic or word sorts increase vocabulary.

Explicit instruction involves the teaching of individual words and the teaching of word-learning strategies. Individual words are learned through discussion that connects the meaning and usage of the word in the context of the text that is being read or the subject that is being taught. Semantic webs or maps help students connect related concepts and other semantic relationships (synonyms, antonyms, multiple mean-

ings, and figurative meanings) to a word. Individual words are learned best through repeated exposures in varied and rich contexts. Word-learning strategies such as the use of contextual clues, dictionaries and thesauruses, and morphemes provide students with the opportunities to learn new vocabulary on their own.

Morphemes are meaning units of language that economize the learning of new words. They can be taught at an oral level to young children. For example, the kindergarten teacher heightens children's awareness of inflectional endings that denote plurals, possessives, and verb tenses and encourages children to be more precise in using these endings in their speaking. Children in first and second grade can be taught common prefixes (un-, re-, dis-) and suffixes (-ing, -ly, -less) that frequently occur in reading. Beginning in third grade, students can be systematically taught common Latin roots (ject, struct, rupt) and Greek combining forms (graph, phono, micro).

Syntax, which supports word meaning and usage, is learned indirectly and explicitly. Young children can be taught syntactic conventions such as word order, noun-verb agreement, and complete sentences at an oral level. As children learn to read and spell, conventions such as parts of speech and simple and complex sentence structures can be systematically taught at a written level.

#### **4. ASSESSMENT**

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Vocabulary can be assessed through activities such as word sorts and listing. In a word sort, children arrange and rearrange word cards into logical categories. The number of rearrangements reflects students' level of conceptualization of word meanings. Sorts with pictures can be used with young children. Listing involves the generation of synonyms, antonyms, or words related to a target word. The number and quality of words generated indicate the breadth and depth of students' vocabularies. Teacher-developed multiple-choice or fill-in-the-blank tests may be used to assess specifically taught vocabulary. Vocabulary can be assessed through standardized measures.

#### **5. MOTIVATION**

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Word sorts and semantic webs or maps provide fun and effective ways to connect words and meanings. Heightening students' awareness of word origins can excite them about learning words. Learning idioms, puns, jokes, and riddles adds to students' understanding of the literal and figurative meanings of words. High-interest books encourage wide reading, which promotes the learning of new vocabulary.

#### **6. LINKAGE TO OTHER READER ACQUISITIONS**

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Vocabulary aids the acquisition of word reading as students can better decode words they know. Vocabulary is vital to comprehension as students must understand most of the words in a text to gain meaning from the text. Vocabulary is equally important to composition.

## REFERENCES FOR VOCABULARY

- Anderson, R.C., Wilson, P.T., and Fielding, L.G. (1988). *Growth in reading and how children spend their time outside of school*. Reading Research Quarterly, 23, 285-303.
- Baumann, J.F., Edwards, E.C., Font, G., Tereshinski, C.A., Kame'enui, E.J., & Olejnik, S.F. (2002). *Teaching morphemic and contextual analysis to fifth-grade students*. Reading Research Quarterly, 37, 150-176.
- Beals, D.E. (1997). *Sources of support for learning words in conversation: Evidence from mealtimes*. Journal of Child Language, 24, 673-694.
- Beck, I.L., & McKeown, M.G. (1991). *Conditions of vocabulary acquisition*. In R. Barr, M.L. Kamil, P.B. Mosenthal, and P.D. Pearson (Eds.), *Handbook of reading research, Vol 2*. (pp. 789-814). NY: Longman.
- Beck, I.L., & McKeown, M.G. (2001). *Text talk: Capturing the benefits of reading aloud experiences for young children*. The Reading Teacher, 55, 10-20.
- Beck, I.L., McKeown, M.G., & Kucan, L. (2002). *Bringing words to life: Robust vocabulary instruction*. New York: Guilford Press.
- Blachowicz, C., & Fisher, P.J. (2002). *Teaching vocabulary in all classrooms (2nd ed.)* Upper Saddle River, NJ: Merrill/Prentice-Hall.
- Bos, C. S., Allen, A.A., & Scanlon, D.J. (1989). *Vocabulary instruction and reading comprehension with bilingual learning disabled students*. National Reading Conference Yearbook, 38, 173-179.
- Carlisle, J. F. (1993). *Selecting approaches to vocabulary instruction for the reading disabled*. Learning Disabilities Research and Practice, 8, 97-105.
- Carlisle, J.F. & Fleming, J. (2003). *Lexical processing of morphologically complex words in the elementary years*. Scientific Studies of Reading, 7, 239-253.
- Curtis, M.E. (1987). *Vocabulary testing and instruction*. In M.G. McKeown and M.E. Curtis (Eds.), *The nature of vocabulary acquisition* (pp. 37-51). Hillsdale, NJ: Lawrence Erlbaum.
- Elbro, C., & Arnbak, E. (1996). *The role of morpheme recognition and morphological awareness in dyslexia*. Annals of Dyslexia, 46, 209-240.
- Eller, R.G., Pappas, C.C., & Brown, E. (1988). *The lexical development of kindergartners: Learning from written context*. Journal of Reading Behavior, 20, 5-24.
- Henry, M.K. (1988). *Beyond phonics: Integrated decoding and spelling instruction based on word origin and structure*. Annals of Dyslexia, 38, 258-275.
- Herman, P.A., & Dole, J.A. (1988). *Theory and practice in vocabulary learning and instruction*. Elementary School Journal, 89, 43-54.
- Juel, C. (1988). *Learning to read and write: A longitudinal study of 54 children from first through fourth grades*. Journal of Educational Psychology, 80, 437-447.
- Kame'enui, E.J., Dixon, R.C., & Carnine, D.W. (1987). *Issues in the design of vocabulary instruction*. In M.G. McKeown & M.E. Curtis (Eds.), *The nature of vocabulary acquisition* (pp. 129-145). Hillsdale, NJ: Lawrence Erlbaum.

- Kuhn, M.R., & Stahl, S.A. (1998). *Teaching children to learn word meanings from context: A synthesis and some questions*. Journal of Literacy Research, 30:119-38.
- McKeown, M.G. (1985). *The acquisition of word meaning from context by children of high and low ability*. Reading Research Quarterly, 20, 482-496.
- Nagy, W.E. (1988). *Teaching vocabulary to improve reading comprehension*. Newark, DE: International Reading Association.
- Nagy, W. E., Anderson, R., Schommer, M., Scott, J.A., & Stallman, A.C. (1989). *Morphological families and word recognition*. Reading Research Quarterly, 24, 262-282.
- Nagy, W.E., & Herman, P.A. (1987). *Breadth and depth of vocabulary knowledge: Implications for acquisition and instruction*. In M.G. McKeown and M.E. Curtis (Ed.), *The nature of vocabulary acquisition* (pp. 19-45). Erlbaum.
- Schatz, E.K., & Baldwin, R.S. (1986). *Context clues are unreliable predictors of word meanings*. Reading Research Quarterly, 21, 439-453.
- Simmons, D.C., & Kame'enui, E.J. (1990). *The effect of task alternatives on vocabulary knowledge: A comparison of students with and without learning disabilities*. Journal of Learning Disabilities, 23, 291-297, 316.
- Snow, C.E., Burns, S, & Griffin, P. (1998). *Preventing reading difficulties in young children*. Washington DC: National Academy Press.
- Stahl, S.A. (1986). *Three principles of effective vocabulary instruction*. Journal of Reading, 29, 662-668.
- Stahl, S., & Kapinus, B. (2001). *Word power: What every educator needs to know about teaching vocabulary*. National Education Association.
- Sternberg, R.J., Powell, J.S., & Kaye, D.B. (1983). *Teaching vocabulary-building skills: A contextual approach*. In A.C. Wilkinson (Ed.), *Classroom computers and cognitive science* (pp. 121-143). NY: Academic Press.
- Wysocki, K., & Jenkins, J. (1987). *Deriving word meanings through morphological generalization*. Reading Research Quarterly, 22, 66-81.

## MATERIALS FOR INSTRUCTION

- Bell, N., & Lindamood, (1997). *Vanilla vocabulary: A visualized/Verbalized vocabulary program*.
- Bush, C. S. (1987). *Language Remediation and expansion: 150 skill-building reference lists*. Austin, TX: Communication Skill Builders.
- Ehrlich, Ida (1972). *Instant Vocabulary*. New York: Pocket Books.
- Gwynne, F. (1970). *The king who rained*. Upper Saddle River, NJ: Prentice-Hall.
- Gwynne, F. (1976). *A chocolate moose for dinner*. Upper Saddle River, NJ: Prentice-Hall.
- Gwynne, F. (1980). *The sixteen hand horse*. Upper Saddle River, NJ: Prentice-Hall.



- Henry, M.K. (1990). *WORDS: Integrated decoding and spelling instruction based on word origin and structure*. Austin, TX: PRO-ED.
- Johnson, K. & Bayrd, P. (1988) *Megawords: Multisyllabic words for reading, spelling, and vocabulary*. Cambridge, MA: Educators Publishing Service.
- Lively, T., August, D., Snow, C., & Carlo, M. (2003). *Vocabulary improvement program*. Baltimore: Paul Brookes' Publishing.

## APPENDIX C: SUPPORT MATERIALS

### WARM-UP ACTIVITY: VOCABULARY KNOWLEDGE RATING

Vocabulary Instruction	3: I know this. I can explain it and use it.	2: I have heard of this. It's vaguely familiar.	1: This is new and unfamiliar.
Tier two Words			
Semantic feature analysis			
Concept Map			
Non-examples			
Text Talk			
Vocabulary Recognition Task			
Word Wizard			
Word consciousness			
Possible sentences			
Silly questions			
Story impressions			
Semantic maps			
Knowledge rating scale			
Context Clues			
Morphology			
Semantic clusters			
Word Walls			
Word play			

K. Stahl, 2004

### *Flu* — Words/phrases

Reception desk

### Odd Remark

Kept talking

She clung to it

## Fell in love

## Haven't recovered

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

## **FLU BY STUART DYBEK**

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Faye's illness had transformed her in a way no diet or face-lift could have. After days of nausea, vertigo, diarrhea; a fast of toast and tea; fever; dreams that came and went more like mirages; an aching lethargy that demanded fourteen-hours sleeping spells from which she'd wake confused, but only too aware of how terribly alone she was, Faye felt better.

The usual grim weariness was gone from around her lips. Her eyes no longer peered out like a miner's from sallow tunnels smudged with mascara. They seemed enlarged with light, glowing limpidly from her pale face. Even the shadow beneath her chin, where her darkness most accumulated, had burned away. It was as if everything unessential had burned away. "What happened to you?" Aldo blurted, startled by the sight of her sitting, legs crossed, back behind the reception desk.

"Flu," Faye said. "Everybody's getting it. I mean, you sit up here in front all day and you're going to come in contact with everything anybody walks in with."

"Everybody should get so sick," Aldo said.

It seemed to Faye an odd remark at the time, but she ignored it and kept talking, about the job, the weather, the flu epidemic. It was the first conversation she'd had since she'd been sick and she clung to it, needing desperately to talk, aware the entire time of how Aldo was watching her.

And later, when people would ask them how they met and fell in love, it was always Aldo who would answer.

"Flu." He'd smile earnestly. "It all started with the flu. I still haven't recovered."

PREFIXES AND ROOTS

Common Prefixes		Other Useful Prefixes	
Un- Re- In-, il-, ir- (not) Dis- En-, em- Non- In-, im- (in) Over- Mis- Sub-	Pre- Inter- Fore- De- Trans- Super- Semi- Anti- Mid- Under-	Number prefixes: Mono- Bi- Tri- Quad- Penta- Hexa- Deca- Cent- Mill	Science: Bio Chemo- Photo- Geo- Astro- Anthro- Psych-

Prefix Activities		Common Roots	
Making new words Not blue = unblue Not cola = uncola  Word sorts Word webs		Aud (hear) Dict (speak) Meter (measure) Min (Little, small) Mit (send) Max (large) Phon (sound) Scrib, script (write)	Spect (see) Struct (build) Logy (study) Graph (draw)

VOCABULARY RECOGNITION TASK (VRT)

Begin with a survey of student knowledge.

Word	I know this word and can tell about it	I have seen this word before	I have never seen this word before

Native American homes.

	3	2	1
wigwam			
apartment			
longhouse			
tipi/tepee			
brush lodge			
asi			

Native American Homes

- 3 = I can tell you what this home looks like and the resources used to make it.
- 2 = I have heard of this kind of home, but I can't tell you much about it.
- 1 = I have never heard of this Native American dwelling.

VRT SCORING PROCEDURES

Score 1 point for each word correctly circled, deduct 1 point for each foil selected.

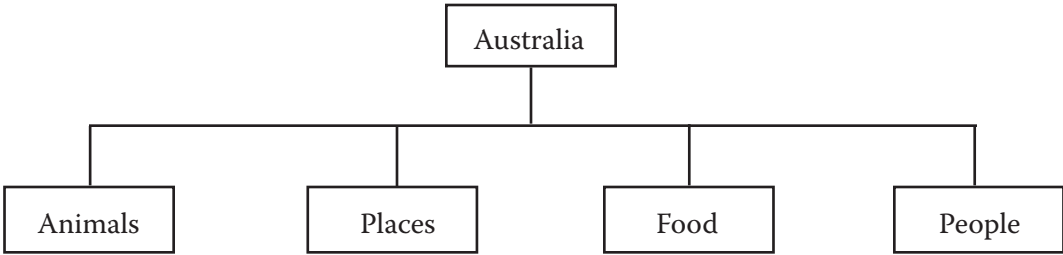
OR

Use a proportional scoring method. For example, 18/25 correct- 1/8= score.

This month we will be reading books about Australia. Below you see a list of words. Put a circle around the words that you are able to read and are sure have something to do with Australia.  
Do not guess, because wrong answers will lower your score.

marsupial	outback	biscuit	koala
Aborigines	dingo	Sydney	didgeridoo
tiger	France	wombat	boomerang
Atlantic Ocean	bat	Melbourne	island
ice block	lollies	Boston	elephant
Pacific Ocean	kangaroo	Silver Bay	bushranger
platypus	convicts	taco	Botany Bay
kiwi	snowy	Britain	echidna
Tasmanian devil			

VRT WEB



VRT SCORING PROCEDURES

Score 1 point for each word correctly circled, deduct 1 point for each foil selected.

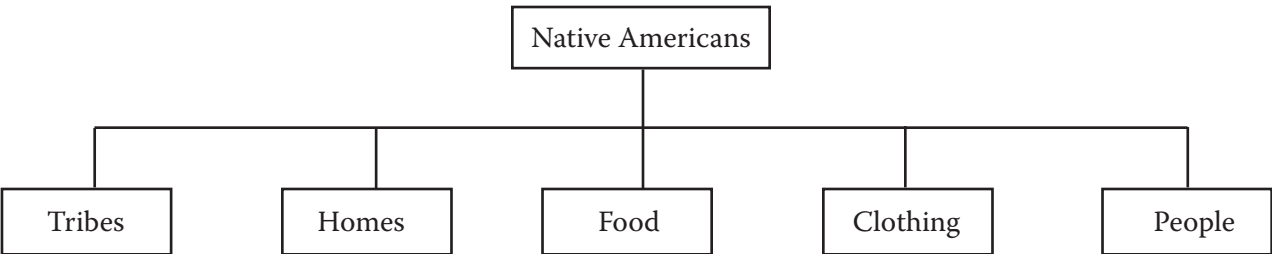
OR

Use a proportional scoring method. For example, 18/25 correct- 1/8= score.

This month we will be reading books about Native Americans. Below you see a list of words. Put a circle around the words that you are able to read and are sure have something to do with Na-tive Americans. Do not guess, because wrong answers will lower your score.

Plains	wampum	moccasin
Woodland	Sun Feast	Buffalo
villa	longhouse	corn
arrow	bow	wigwam
Queenie	horn	Cherokee
tent	drum	Iroquois
walkabout	earth lodge	Paris
travois	canoe	Sioux
reservation	buckskin	coffee
Hiawatha	Yanni	Pocohantas

VRT WEB





# ALASKA READING

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## Volume IV: Comprehension

### Part 3: Imaging

#### PARTICIPANT GUIDE

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##### OBJECTIVES:

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By the end of this session, participants will be able to identify instructional knowledge that supports reader acquisition in the area of comprehension.

- Participants will learn the components of imaging. (Structure of Language)
- Participants will learn about deficits that interfere with imaging. (Learner Process)
- Participants will learn the process for developing imaging. (Teaching Methods)
- Participants will learn ways to assess imaging. (Assessment)
- Participant will understand the importance of imaging as it relates to comprehension. (Linkage to Other Reader Acquisition)
- Participants will understand that being able to image motivates students to read more. (Motivation)

##### VIDEO SUMMARY

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*Note: The following materials contain the same information as the video. It is included to help the facilitator better understand the content.*

A method of teaching students to image or visualize to enhance students' learning of oral and written information will be introduced in this section. If you have ever had students in your class who could read accurately and fluently but had difficulty understanding or recalling information, it may be due to a concept imagery problem, not being able to make the movies in their head. This step-by-step procedure for building this skill will improve good readers' comprehension and is essential for those students struggling in this area.

Contents of this section include components of imagery, difficulties with imagery, methods used to teach imagery, and how to apply imagery to higher order thinking skills and writing. For the purpose of this section the words imaging and visualization will be used interchangeably.

## PARTICIPANT NOTE TAKING GUIDE

BY KIT ROBERTS, M.A., CCC-SLP

### Visualization is a Sub skill of Comprehension

- Important to teach
- Much of our thinking is done visually
- Stimulate visualizing a few minutes every day
- Highly engaging
- Needed for higher order thinking questions

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## PRACTICE ACTIVITY: DISCUSSION

### Theory of Dual Coding Classroom Instruction

- To convey knowledge, we use language
- Language is a communication tool
- It doesn't contain anything real
- Used to verbally represent something real
- 70% of classroom instruction is presented orally
- 30% is presented in writing

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### Degrees of Separation

- Real Object - concrete
- Picture or Image is 1 time removed (abstract)
- Word is 2 times removed (abstract, symbolic)

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**PARTICIPANT NOTE-TAKING GUIDE**

**Words map to images**

- verbal representation stimulates
- non-verbal, mental representation
- words + images are integrated

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“Cognition is proportional to the extent that the coding mechanisms of mental representation (imagery) and language are integrated.”

Allan Paivio

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**Dual Coding Training**

- Helps students to derive meaning from text
- Improves ability to retain information, both oral and written
- Improves verbal and written expression

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**PARTICIPANT NOTE-TAKING GUIDE**

**Two Predictors to Understand  
Oral and Written Language**

- Ability to create mental representations (Images)
- Ability to map the image to words and language
- Words and images must be linked together

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**Dual Coding Dysfunction**

- Up to 30% of population
- Poor ability to create imagery to gestalt
- Poor ability to create relevant imagery
- Visual-motor processing problems
- Information gaps
- Poor vocabulary and poor oral and reading comprehension
- Difficulty following directions

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**Higher Order Thinking Skills**

- Summarizing the main idea
- Inferring
- Concluding
- Predicting
- Extending
- Evaluating text

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# PARTICIPANT NOTE-TAKING GUIDE

## Students with attention problems

- will lose the gestalt for the moments of time they lose their attention
- if they lose attention momentarily, they can still get the overall gestalt
- if they lose attention for several moments of time, they will not get the overall gestalt
- they will not be able to answer higher order thinking questions or fact questions

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## PRACTICE ACTIVITY: DISCUSSION. DEFINE DUAL CODING, IMAGING VISUALIZATION, AND COGNITION. DISCUSS QUOTE BY ALLAN PAIVIO.

### Steps for Dual Coding (imaging and describing).

1. Students describe a simple, given picture.
2. Students image (I) and describe (D) single words.
3. Students ID each sentence in a paragraph, summarize the main idea (MI) of the paragraph and answer higher order thinking skills (HOTS) questions from the imaged gestalt.
4. Students ID multiple sentences of a paragraph, + MI and HOTS questions.

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5. Students ID whole paragraphs, + MI and HOTS questions.
6. Students ID whole pages, + MI for each paragraph and answer HOTS questions from the imaged gestalt of the page.
7. Students transition to written summaries at any point writing a single word, a main idea, a whole paragraph of information or a whole page of information, after they have demonstrated they can I and D orally.

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## PRACTICE ACTIVITY: DISCUSS THE IMPORTANCE OF EXPLAINING THE PURPOSE OF IMAGING TO YOUR STUDENTS. ALSO DISCUSS CLASSROOM APPLICATION STRATEGIES.

## PARTICIPANT NOTE-TAKING GUIDE (OPTIONAL PART)

### II: PART 1: DESCRIBING A PICTURE

Reason for teaching imaging: improves the ability to understand and remember what we hear and read. Draw two heads to show how words are what we use to take a picture from our brain to another's brain.

1. Students describe a simple, given picture.

Steps for describing a simple picture:

- a. Students chooses-remove s a picture to describe
- b. Teacher asks questions with choice and contrast to develop verbalizing. (Is the boy short or tall?)
- c. Teacher checks to make sure all the information has been included in order to image the picture accurately.
- d. Teacher summarizes the picture that the student's words made her/him see.
- e. Teacher looks at the picture and discusses it with the students.

Use a simple colored pictured with few details and simple background. Practice until the students are able to demonstrate the steps fluently.

**Practice Activity:** Describing a Picture

### II: PART 2: IMAGING AND DESCRIBING SINGLE WORDS

1. Student decibes a personal image word.

Steps for Personal Imaging

- a. Student recalls, images, and describes something personal but simple such as a pet, room or toy.
- b. Teacher questions with choice and contrast.
- c. The structure words are checked through for details and reverbalizatiion.
- d. Teacher gives a verbal summary using the phrase: "Your words made me a picture...."

2. Student describes a noun.

Steps for Noun Imaging

- a. Student visualizes and verbalizes a noun. The word should be familiar as well as high in imagery.
- b. Teacher questions specifically with choice and contrast to develop detailed imagery.
- c. Structure words are checked through for details and reverbalization.
- d. If student has been given a choice, have the student describe the image to be sure not restating or paraphrasing.
- e. Request gesturing.
- f. Conclude session with a verbal summary using the phrase: "Your words made me picture...."
- g. Practice this step until very confident.

## PARTICIPANT NOTE-TAKING GUIDE (OPTIONAL PART)

### II: PART 3: IMAGING AND DESCRIBING MULTIPLE SENTENCES (PARAGRAPHS)

1. Image and describe each sentence (or two sentences) in a paragraph, summarize the main idea (MI) of the paragraph and answer higher order thinking skills (HOTS) questions from the imaged gestalt.

Steps for imaging and describing sentences with HOTS

- a. Student reads the first sentence of a paragraph and tells what the words make him/her see and “places” that image on (cut) a colored square to anchor the image. Continue with each sentence.
- b. Teacher asks open-ended questions and questions with choice and contrast.
- c.. Student tells a picture summary while touching the square for the appropriate sentence.
- d. Student gives a word summary of the information in the text.

HOTS:

Student states the main idea of the paragraph. Teacher asks “why” questions in order for students to:

- Infer
- Draw conclusions
- Predict
- Evaluate

Increase the difficulty of the material as students become skilled at the procedure. This step may seem lengthy at first, but as students become skilled, the pace will quicken.

**Practice Activity:** Imaging and Describing Multiple Sentences (Paragraphs).

### II: PART 4: APPLICATION TO HIGHER ORDER THINKING SKILLS AND AND WRITING

Picture summary by Brittney [Step (c.)]

Text summary [Step (d.)]

Facts and HOTS questions:

1. Transition to Written Summary

Steps for written summary

- a. Remind students of the gestalt.
- b. Teach parts for writing; sentence structure, basic punctuation, and spelling.
- c. Establish the main idea, number of details, and conclusion restating the main idea.

2. Generating a written paragraph from an image.

The written word is a way to create images in the mind of the reader from the mind of the writer. The writer processes the picture in his brain using words to convey his picture to the reader.

**Practice Activity:** Discuss classroom applications.

## APPENDIX B: SHORT MATRIX

Volume IV: Comprehension, Part 3: Imaging					
Structure of Language	Learner Processes	Teaching Methods	Assessment	Motivation	Linkage to Other Reader Acquisitions
<ul style="list-style-type: none"> <li>• Reading sentences and text fluently for ability level.</li> <li>• Words need to map to the objects or concepts the words represent</li> <li>• Dual-coding systems: a verbal system for language and a nonverbal system that deals primarily with imagery</li> </ul>	<ul style="list-style-type: none"> <li>• Imaging is a sub-skill of comprehension</li> <li>• Students need language to convey knowledge</li> <li>• Learner is able to dual-code to drive meaning from text, retain information</li> <li>• Learner is able to activate images for high order thinking skills</li> </ul>	<ul style="list-style-type: none"> <li>• Developmental aspects to imaging</li> <li>• Encourage students to use imaging as a comprehension strategy until internalized</li> <li>• Teach in sequence:               <ol style="list-style-type: none"> <li>1. Image from a known object/picture, describe.</li> <li>2. Image and describe a single word (cowboy)</li> <li>3. Image and describe paragraph</li> <li>4. Image and describe paragraph and answer main idea questions and higher order thinking skills questions</li> </ol> </li> <li>• Translate into writing.</li> </ul>	<ul style="list-style-type: none"> <li>• Ask questions:               <ul style="list-style-type: none"> <li>“What do those words make you see?”</li> <li>“How would that look?”</li> </ul> </li> <li>• Number of higher order thinking questions and fact questions answered correctly</li> <li>• Describing orally or in writing indicates what has been imaged</li> </ul>	<ul style="list-style-type: none"> <li>• Reading becomes real with the ability to image. The words make you “see” what the writer is saying and allows the brain to remember.</li> </ul>	<ul style="list-style-type: none"> <li>• Efficient imaging skills allow the reader to remember information presented in any text or subject area</li> <li>• Makes reading more pleasurable</li> </ul>



## APPENDIX B: LONG MATRIX

### 1: STRUCTURE OF LANGUAGE

Text comprehension, the ability to gain meaning from text, is the ultimate goal of reading. In order to comprehend text, students must acquire knowledge of how to read words and attach meaning to words. They must acquire knowledge of how words are combined into sentences and how sentences are organized into paragraphs and paragraphs into cohesive text to create meaningful information. Imaging increases the ability to acquire knowledge by enhancing retention of information. Sadowski (1983) believes the ability to image helps in both spatial and verbal problem solving when reading text. The foundation of this approach is that “mental imagery is a knowledge representation system that readers can use in organizing, integrating, and retrieving information from written text” (Gambrell, Koskinen, 2002).

### 2: LEARNER PROCESSES

Children get better at monitoring their comprehension as they get older so there appears to be a developmental aspect to it. In a study cited by Gambrell and Koskinen, it was found that “when specifically directed to induce mental imagery, the majority of the poor readers (70%), reported that they did so, and they performed significantly better at the comprehension monitoring task than did the control group.” It was concluded that imagery causes readers to expend more energy into integrating information across text, which increased their comprehension. Encouraging/reminding students to image as one comprehension strategy is probably needed until the strategy is internalized.

Imaging is a sub-skill of comprehension. A student’s ability to think about something is dependent on their ability to integrate words and images. Students need language to convey understanding of oral and written language.

Students, who are able to dual code to derive meaning from text, retain information, fold other comprehension strategies into the imaging process, and repair and revise images with new information.

Gambell and Jawitz (1993) did a study with 120 fourth graders who read a 925 page basal reader story with five text-relevant illustrations. Children were divided into four groups. The group instructed to form mental images of their own as well as attend to illustrations significantly outperformed all the other groups on several measures of comprehension and recall. The imagery-only group outperformed the illustrations-group on recall of story structure elements and complete recall of the story. Just using the word, imaging, stimulated the part of the brain that can image without instruction in any specific strategies for making images.

### 3: TEACHING METHODS

- Most students only need to be reminded of this comprehension strategy. Others need direct instruction in stimulating the visual image of the whole or gestalt. Suggested teaching sequence (Gambrell, Koskinen, 2002) is to start with a text (narrative and informational) that is easy to visualize. The teacher reads aloud while the students form mental images. Discuss the similarities and differences in their images. When students understand the rationale for using imaging—improving comprehension—they are more likely to self-generate images while reading. The teacher may need to be very specific initially, such as, “make pictures in your mind of the events in the story” or “make a

picture in your mind of what it must be like to live in this place.” Encourage students to use this strategy in parts of text that seem important to remember.

- For younger students or those with extreme difficulty imaging, start with a simple picture. Have students describe the picture, which is not in view of the teacher, all the while asking choice and contrast questions and summarizing the information. Move to single word with high imaging possibilities, such as a clown or cowboy. The next step would be imaging sentences and paragraphs and adding higher order thinking questions.
- Students need to know that using this strategy can also improve their writing by imaging before writing. Students will process information and use more elaborate language by using this strategy.

#### 4: ASSESSMENT

Visual imagery is a good tool for monitoring and assessing comprehension. Attempting to form mental pictures helps the reader know if they are being successful at interpreting the text. The teacher must question the imaging of the students by asking questions. “What do those words make you see?” “How would that look?” Using higher order thinking questions about the text, will help to assess the imaging ability of the students.

#### 5: MOTIVATION

Reading becomes real with the ability to image. The words make you “see” what the writer is saying, and allows the brain to remember.

#### 6: LINKAGE TO OTHER READER ACQUISITIONS

Efficient imaging skills allow the reader to remember information presented in any text or subject area. Reading is pleasurable and meaningful.

#### REFERENCES FOR IMAGING

- Anderson, R.C. (1974). *Concretization in sentence learning*. Journal of Educational Psychology, 66, 179-183.
- Anderson, R.C., & Kulhavy, R.W. (1972). *Imagery and prose learning*. Journal of Educational Psychology, 63, 242-243.
- Bell, N. (1986) *Visualizing and Verbalizing for Language Comprehension and Thinking*. Paso Robles, CA. Academy of Reading Publications.
- Corkill, A.J., Glover, J.A., & Bruning, R.H. (1988). *Advance organizers: Concrete versus abstract*. Journal of Educational Research, 82, 76-81.
- Gambrell, L.B. (1982). *Induced mental imagery and the text prediction performance of first and third graders*. In J.A. Niles & L.A. Harris (Eds.), *New inquiries in reading research and instruction* (31st yearbook of the National Reading Conference, pp. 131-135). Rochester, NY: National Reading Conference.
- Gambrell, L.B., & Bales, R.J. (1986). *Mental imagery and the comprehension-monitoring performance of fourth- and fifth-grade poor readers*. Reading Research Quarterly, 21, 454-464.

- Gambrell, L.B., & Jawitz, P.B. (1993). *Mental imagery, text illustrations, and children's story comprehension and recall*. Reading Research Quarterly, 28, 264-276.
- Goetz, E.T., Sadoski, M., Fatemi, Z., & Bush, R. (1994). *That's news to me: Readers' responses to brief newspaper articles*. Journal of Reading Behavior, 26, 125-138.
- Harvey, Stephanie, & Goudvis, Ann (2000). *Strategies That Work: Teaching Comprehension to Enhance Comprehension*. Chapter "Visualizing," p. 97-104.
- Long, S.A., Winograd, P.A., & Bridge, C.A. (1989). *The effects of reader and text characteristics on reports of imagery during and after reading*. Reading Research Quarterly, 24, 353-372.
- Paivio, A. (1971). *Imagery and verbal processes*. New York: Holt, Rinehart, and Winston. Reprinted (1979). Hillsdale, NJ: Erlbaum.
- Paivio, A. (1986). *Mental representations: A dual coding approach*. New York: Oxford University Press.
- Pressley, G.M. (1976). *Mental imagery helps eight-year-olds remember what they read*. Journal of Educational Psychology, 68, 355-359.
- Sadoski, M. (1983). *An exploratory study of the relationships between reported imagery and the comprehension and recall of a story*. Reading Research Quarterly, 19, 110-123.
- Sadoski, M. (1985). *The natural use of imagery in story comprehension and recall: Replication and extension*. Reading Research Quarterly, 20, 658-667.
- Sadoski, M., Goetz, E.T., & Avila, E. (1995). *Concreteness effects in text recall: Dual coding or context availability?* Reading Research Quarterly, 30, 278-288.
- Sadoski, M., Goetz, E.T., & Fritz, J.B. (1993). *Impact of concreteness on comprehensibility, interest, and memory for text: Implications for dual coding theory and text design*. Journal of Educational Psychology, 85, 291-304.
- Sadoski, M., Goetz, E.T., & Kangiser, S. (1988). *Imagination in story response: Relationships between imagery, affect, and structural importance*. Reading Research Quarterly, 23, 320-336.
- Sadoski, M., Goetz, E.T., Olivarez, A., Jr., Lee, S., & Roberts, N.M. (1990). *Imagination in story reading: The role of imagery, verbal recall, story analysis, and processing levels*. Journal of Reading Behavior, 22, 55-70.
- Sadoski, M., & Paivio, A. (1994). *A dual coding view of imagery and verbal processes in reading comprehension*. In R.B. Ruddell, M.R. Ruddell, & H. Singer (Eds.), *Theoretical models and processes of reading* (4th ed., pp. 582-601). Newark, DE: International Reading Association.
- Sadoski, M., Paivio, A., & Goetz, E.T. (1991). *A critique of schema theory in reading and a dual coding alternative*. Reading Research Quarterly, 26, 463-484.
- Sadoski, M., & Quast, Z. (1990). *Reader recall and long term recall for journalistic text: The roles of imagery, affect, and importance*. Reading Research Quarterly, 25, 256-272.
- Steingart, S.K., & Glock, M.D. (1979). *Imagery and the recall of connected discourse*. Reading Research Quarterly, 15, 66-83.
- Wharton, W.P. (1980). *High imagery and the readability of college history texts*. Journal of Mental Imagery, 4, 129-147.

## APPENDIX C: SUPPORT MATERIALS

Bell, Nanci (1991 ). *Visualization and Verbalization for Language Comprehension*. Gander Publishing.

Harvey, Stephanie, & Goudvis, Ann (2000). *Strategies That Work: Teaching Comprehension to Enhance Comprehension*. Stenhouse Publications

<http://students.lisp.wayne.edu>

# ALASKA READING

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## Volume IV: Comprehension Part 4: Constructing Text with Keyword Outlines

### PARTICIPANT GUIDE

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#### OBJECTIVES

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By the end of this session, participants will be able to:

- Understand why many students don't or can't write, and its relationship to reading comprehension. (Linkage to Other Reader Acquisitions)
- Understand that writing can be made easier by learning the patterns of other writings. (Learner Process)
- Understand that writing can be made easier by imitation, and often easier. (Learner Processes)
- Know how to use a "source context" from other content subject areas which can actually help students understand content, and how writing is a part of other content subject areas. (Motivation)
- Demonstrate how to use "keyword" outlines to get started in writing. (Structure of Language, Teaching Methods and Learner Process)
- Understanding the importance of "telling back" by verbally making sentences out of keyword outlines. (Assessments and Structure of Language)
- Understand how important vocabulary development is to understanding and thinking when students comprehend. (Linkage to Other Reader Acquisitions)
- How to make "keyword" outlines from source texts. (Structure of Language, Teaching Methods and Learner Process)

#### VIDEO SUMMARY

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Andrew Pudewa of "Excellence in Writing" concentrates on improving student comprehension through the use of "keyword" outlines. The video begins with Mr. Pudewa's explanation of why many students dislike writing and why they often have great difficulty in beginning to write because they don't know what to write. Many of these students also struggle with reading and comprehension. The instructor explains the use of "keyword" outlines and how it is done with students. Using five excerpts from text, the instructor takes the participants through a step by step process of how to use "keyword" outlines with all students regardless of age. (NOTE: Mr. Pudewa does state that this process is more difficult with students younger than second grade.) Discussion of using text to further reading comprehension is referred to throughout the session. Mr. Pudewa's section on 6 Trait Writing from his manual is included with permission in Appendix C.

# **FACILITATOR SYLLABUS & PARTICIPANT GUIDE** BY ANDREW PUDEWA

## **I. KEY CONCEPTS**

- A. Most children who dislike writing have difficulty partly because they “don’t know what to write about.” Many of those children also struggle with reading and comprehension.
- B. Being able to think of something to write about should not be a prerequisite for learning how to write. Imitation, as a critical part of learning, is not only OK, but actually a good way to begin learning to write.
- C. Using a “source text” allows the student to “get content” for writing, while reviewing content from subjects such as history, science, literature, geography, etc. Writing should be a part of the study of these subjects rather than a “subject” unto itself.
- D. Just as Benjamin Franklin took “short hints of the sentiment of each sentence,” to teach himself to write, our students can use “keyword outlines” to help them get started with writing from simple source texts.
- E. Source text can be fiction or non-fiction. Aesop’s fables work well. Material should be at or below the reading level of the child. Fables and paragraphs of 4-7 sentences are ideal.
- F. Having students tell back the content by verbally making sentences out of the keywords serves as a good test of the outline, strengthens understanding of what was read, and prepares the student for writing the ideas in complete sentences.
- G. Vocabulary development is essential to understanding and thinking. While doing keyword outlines, teachers and students have additional opportunity to focus on meaning and pronunciation of words.
- H. Making keyword outlines from source texts dramatically improves comprehension, as it causes the student to make an immediate shift from passive reading (watching the words go by) to more active reading (asking a question about what is being read).

A Method of Learning to Write Well

...when my Father happened to find my papers...he took occasion to talk to me about the manner of my writing, observed that although I had the advantage of my antagonist in correct spelling and pointing (which I owed to the printing house), I fell far short in elegance of expression, in method and in perspicuity, of which he convinced me by several instances. I saw the justice of his remarks, and thence grew more attentive to the manner in writing, and determined to endeavor at improvement.

About this time I met with an odd volume of the Spectator. It was the third. I had never before seen any of them. I bought it, read it over and over and was much delighted with it. I thought the writing excellent, and wished if possible to imitate it. With that view, I took some of the papers, and making short hints of the sentiment in each sentence, laid them by a few days, and then without looking at the book, tried to complete the papers again, by expressing each hinted sentiment at length and as fully as it had been expressed before, in any suitable words, that should come to hand.

Then I compared my Spectator with the original, discovered some of my faults and corrected them. But I found I wanted a stock of words or a readiness in recollecting and using them, (which I thought I should have acquired before that time), since the continual occasion for words of the same import but of different length, to suit the measure or of different sound for the rhyme would have laid me under a constant necessity of searching for variety, and also have tended to fix that variety in my mind, and make me master of it.

I also sometimes jumbled my collections of hints into confusion, and after some weeks, endeavored to reduce them into the best order, before I began to form the full sentences and complete the paper. This was to teach me method in the arrangement of thoughts. By comparing my work afterwards with the original, I discovered many faults and amended them; but I sometimes had the pleasure of fancying that in certain particulars of small import, I had been lucky enough to improve the method or the language and this encouraged me to think I might possibly in time come to be a tolerable English writer, of which I was extremely ambitious.

—from The Autobiography of Benjamin Franklin

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## The Fox and the Grapes

Once a hungry fox saw some grapes. They looked juicy and delicious. He jumped to try and get them. But they were too high. He jumped and jumped and soon became tired. Finally he was exhausted and gave up. Then he said, “They’re probably too sour anyway.”

[illegible]



# The Hare and the Tortoise

One day, a Hare was making fun of a Tortoise for being so slow upon his feet. The Tortoise, annoyed with this teasing, offered to run a race with the Hare. The Hare laughed and said it would be no contest, but agreed to race anyway. It was decided that the fox should set the course and be the judge. Although they started at the same time, the Hare was soon so far ahead, that he thought he might as well have a rest, so he lay down and fell fast asleep. Meanwhile, the Tortoise kept plodding on, and in time, reached the finish line. The Hare awoke with a start and ran to the finish, only to find that the tortoise had already won the race.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

**Practice Activity:** Questions and Discussions on keyword outlines.

II. Brown Bear

**Brown Bears**

Brown Bears were  
once quite common in Europe,  
North America and parts of Asia.  
Because they sometimes killed cattle  
they have been persecuted, and many have been  
destroyed.

Now there are  
very few places in Europe  
where bears remain.  
In North America they survive  
in Canada and Alaska  
and in United States National Parks.

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**Practice Activity:** Participants verbalize keyword outlines using complete sentences to retell the story.

## This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Page 10

#### IV: Public Speaking and Verbalizing

- A Talking it through helps the child understand what they wrote.
- B. Saying it back verbally
  - 1. Tests the outline
  - 2. Helps children prepare to write complete sentences
- C Public Speaking
  - 1. Enables all children to have an opportunity to practice short presentation skills
  - 2. Rules for presentation:
    - Look down and read the keyword outline
    - Look up, think, and speak what you have read

**Practice Activity:** Discussion and questions on verbalizing and public speaking.

#### V. "How Keyword Outlines Increase Comprehension"

1. THINKING is a specific skill and how you ask a question helps students THINK.

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2. When doing a KEY WORD outline you automatically engage in THINKING and better understand what the content is.

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3. When a student first reads, questions are answered, the student VERBALIZES, and finally rewrites from the keyword outline. Comprehension is IMPROVED.

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4. Keyword outlines can be used easily with all CONTENT areas.

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5. Much PRACTICE is needed with how to do the keyword outlines.

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6. Remember the different ways to do keyword outlines depends on the AGE AND ABILITY of the student.

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**Practice Activity:** Discuss with a partner how keyword outlines increase comprehension.

#### IV. Music and IQ

A team of scientists at the University of California, Irvine conducted an experiment to test the affects of listening to music on the intelligence of college students. Selecting 36 undergraduates with differing musical tastes, researchers planned to test mental ability by using a standard multiple choice pattern-analysis test. For a period of ten minutes just before taking the test, students were exposed to either complete silence, relaxation music with verbal instructions, or Mozart's Piano Sonata K448. Their responses were measured using the Stanford-Binet spatial-temporal intelligence scale. When tested, the college students showed no significant improvement after having listened to the relaxation tape as compared to the silence. However, after listening to the Mozart piano music, their test scores showed an amazing 6.4% average increase in correct answers, which translates to an increase of 8-9 points in actual measurable IQ. Unfortunately, the results were not permanent. When students were tested again a week later without the benefit of a Mozart "tune-up," their scores dropped back down to normal.

Source:

University of California, Irvine Center for Neurobiology of Learning and Memory  
Frances Rauscher, Gordon Shaw and Katherine Ky;  
summarized from October 1993 Nature magazine.

**Practice Activity:** Participants are to do a keyword outline using "Music and I.Q." This excerpt is much more difficult. As soon as you complete the outline, please verbalize with a partner.

## CONCLUSION AND DISCUSSION

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## ASSESSMENT AND APPLICATION

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Participants are to pick a short passage to use with their class. They are then to do a keyword outline using the process discussed in this session. Write a short summary of the passage chosen and experience with students. How does it compare to other writing activities?

## APPENDIX B: SHORT MATRIX

Volume IV: Comprehension   Part 4: Constructing Text with Keyword Outlines					
Structure of Language	Learner Processes	Teaching Methods	Assessment	Motivation	Linkage to Other Reader Acquisitions
<ul style="list-style-type: none"> <li>• Functions and uses of words in sentences (syntax or grammar)</li> <li>• Sentences</li> <li>• Paragraphs</li> <li>• Text</li> </ul>	<ul style="list-style-type: none"> <li>• As learner plans, organizes, and generates text, the learner must concentrate on purpose, audience, and meaning</li> <li>• Learner attends to syntax, spelling and handwriting</li> <li>• Learner successfully communicates message</li> <li>• Wide reading exposes student to syntax and style</li> <li>• Students with LD/RD and ELL may require special instruction</li> </ul>	<ul style="list-style-type: none"> <li>• Direct instruction of syntax or grammar</li> <li>• Teaching the structures of narrative and expository text</li> <li>• Explicit spelling and handwriting are necessary complements to writing instruction</li> </ul>	<ul style="list-style-type: none"> <li>• Rubrics can be constructed to measure various aspects of writing</li> </ul>	<ul style="list-style-type: none"> <li>• Writing riddles, jokes letters, and messages</li> <li>• Writing poetry</li> <li>• Structuring writing into step-by-step process</li> </ul>	<ul style="list-style-type: none"> <li>• Vocabulary, spelling, comprehension, syntax, and handwriting are important acquisitions for constructing text</li> <li>• Understanding text for construction facilitates understanding of text for comprehension</li> </ul>

## **APPENDIX B: LONG MATRIX**

### **1. STRUCTURE OF LANGUAGE**

Composition requires students to use all their acquired knowledge of language and print. To construct text, students need to understand the meanings of words and how to spell them. Just as with text comprehension, they must understand how words combine into sentences, paragraphs, and text to create meaningful information. However, when students are constructing text, they are the authors who must write with a purpose, to an intended audience, and to convey meaningful information.

### **2. LEARNER PROCESSES**

As the learner constructs text, the learner must concentrate on purpose, audience, and meaning as he or she plans, organizes, and generates information. The learner must draw from background knowledge and select appropriate words from his or her vocabulary to express the information. While writing, the learner must hold onto the information and attend to syntax, spelling, and handwriting. Throughout the process, the learner monitors the content and meaning of the text and makes necessary adjustments. Ultimately, the information is successfully communicated to the intended audience.

Young children begin to write words and messages as soon as they understand that letters represent the sounds that make up spoken words. Even though their early writings lack conventional spellings and syntax, children learn that their thoughts can be expressed by writing letters and words on paper. As students begin to read and with explicit instruction in spelling, grammar, and composition, their constructed texts reflect more conventional spellings, demonstrate understanding of syntactic conventions, and have a cohesive flow. Through wide reading, students are exposed to a variety of writing structures and styles that they can imitate in their writing. Students with reading or learning disabilities may have difficulties with multiple aspects of composition such as planning and organizing, sentence structure, vocabulary, word retrieval, spelling, and/or handwriting and may require special instruction. English language learners may experience many of the same difficulties as students with reading or learning disabilities and may require special instruction.

### **3. TEACHING METHODS**

Syntax or grammar refers to the rules that allow for the combining of words into sentences. Syntactic knowledge increases students' comprehension of words and sentences and their use of words to produce meaningful sentences. Instruction begins at an oral level with young children. The teacher increases children's awareness of syntactic conventions such as using complete sentences and encourages children to use complete sentences and other conventions in their speaking. When reading to young children, the teacher can point out syntactic conventions in print such as sentences that are demarcated by capital letters and punctuation marks or paragraphs that are indicated by indentions. The teacher can discuss words in sentences that name a person, place, or thing and words that show action.

Beginning in first grade, students need explicit instruction to learn syntactic conventions such as parts of speech, simple and complex sentence structures, and rules for capitalization and punctuation. As students learn parts of speech, they understand how words function in the context of a sentence, which supports vocabulary learning. The teaching of the parts of speech can be done in a manner that makes these abstract concepts concrete. For example, students can learn color codes for the different parts of speech



or mark them in unique ways such as underlining nouns with a straight line and underlining verbs with a squiggly line. Students can learn about sentences and parts of speech through sentence expansion activities, where students write a simple sentence then add to it. For example, to the sentence The dog ate, students can add an adjective that describes the dog, an adverb that tells how the dog ate, a prepositional phrase that tells where the dog ate, and a dependent clause that tells why the dog ate in that manner or place. Sentence expansion activities can also be completed at an oral level.

Students benefit from understanding the structure of narrative and expository paragraphs for writing. These structures mirror what they have learned from comprehension instruction. A narrative paragraph contains characters, a setting, a problem and resolution, and a sequence of events. As students initially write narrative text, it is helpful for them to learn transitional words such as first, next, then, and finally that will aid the sequencing of the events in their text. As students gain skill in writing narrative text, they will learn how to sequence events without reliance on transitional words.

Expository text, as students have learned from reading, will focus on a subject. A topic sentence usually states a main idea and other sentences will provide support and details for the main idea. There are several forms of expository writing that are useful for students to know: 1) Informational paragraphs, which discuss or summarize information about a topic; 2) descriptive paragraphs, which use description to evoke images of people, place, or events; 3) persuasive paragraphs, which express a point of view and support for that view; 4) process paragraphs, which explain a step-by-step process or procedure; and 5) compare-and-contrast paragraphs, which emphasize similarities and differences between two objects, people, places, or experiences. Prompts such as pictures or sentence starters are helpful to initiate students' writing.

Students need adequate practice to develop competency at the paragraph level. When students can successfully write single paragraphs, they learn how to combine paragraphs into longer discourse. Paragraph and composition writing should include the idea that writing is a process. Before writing, students plan their writing through brainstorming or outlining. They write an initial draft, revise and edit the draft, and write a final copy.

Explicit handwriting instruction and spelling instruction are necessary complements to composition. Automatic handwriting motivates students to write, facilitates the flow of ideas onto the paper, and prevents fatigue. Thorough knowledge of orthographic patterns helps student clearly convey an intended message through correct spelling and encourages them to use words that are most appropriate to their message instead of settling on easy-to-spell words that are not as appropriate.

#### 4. ASSESSMENT

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Rubrics can be constructed to assess various aspects of students' composition. The rubrics might include scores for organization, maintaining the topic, fully expressing the topic, capitalization and punctuation, word choice, sentence variety and complexity, spelling, and handwriting.

#### 5. MOTIVATION

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Students are motivated by writing riddles and jokes and writing letters and messages to send to people who are not present. Poetry provides short, fun, and meaningful writing exercises. Personal experiences and other "real life" writing, can be shared in journals and weekend news reports. Students can be motivated to write when paragraph structures are outlined in step-by-step procedures. For example, the first sentence in a descriptive paragraph states the object to be described and its category, the second sentence states the

function or use of the object, the next two sentences describe characteristics of the object, and the final sentence restates the first sentence, gives a statement of fact concerning the object, or expresses an opinion about the object. As students gain proficiency in vocabulary, syntax, and paragraph writing, this formulaic structure yields to more natural expression.

## 6. LINKAGE TO OTHER READER ACQUISITIONS

Vocabulary, spelling, comprehension, and handwriting are important acquisitions that assist students in learning to construct text. Syntactic and background knowledge are also important.

### References for Writing

Berninger, V. (1999). *The “write stuff” for preventing and treating writing disabilities. Perspectives*, 25, 20-22.

Berninger, V., Vaughan, K., Abbott, R., Abbott, S., Brooks, A., Rogan, L., Reed, E., & Graham, S. (1997). *Treatment of handwriting fluency problems in beginning writing: Transfer from handwriting to composition. Journal of Educational Psychology*, 89, 652-666.

Calfee, R. Chambliss, M. & Beretz, M. (1991). *Organizing for comprehension and composition*. In R. Bowler and W. Ellis (Eds.), *All Language and Creation of Literacy*. Baltimore: The Orton Dyslexia Society.

Rubin, H. (1988). *Morphological knowledge and early writing ability. Language and Speech*, 31:337-55.

Scarborough, H.S. (1994). *Early syntactic development of dyslexic students. Annals of Dyslexia* 41:207-220.

Sterling, C., Farmer, M., Morgan, S., & Matthews, C. (1998). *Adult dyslexic writing. Dyslexia: An International Journal of Research and Practice* 4: 1-15.

### Materials for Instruction

Berninger, V., & Abbott, S. (2003). *PAL Research-supported reading and writing lessons*. San Antonio, TX: The Psychological Corporation.

Carreker, S. (1993). *Multisensory grammar and written composition*. Houston, TX: Neuhaus Education Center.

Ervin, P. (1992). *The Winston grammar program*. Cambridge, MA: Educators Publishing Service.

Greene, V.E., & Enfield, M.L. (1987). *Report form comprehension guide*. Bloomington, MN: Language Circle Enterprises.

Greene, V.E., & Enfield, M.L. (1987). *Story form comprehension guide*. Bloomington, MN: Language Circle Enterprises.

King, D.H. (1986). *Keyboarding skills*. Cambridge, MA: Educators Publishing Services.

King, D.H. (1987). *Cursive writing skills*. Cambridge, MA: Educators Publishing Services.

King, D.H. (1989). *Writing skills level 1 and 2*. Cambridge, MA: Educators Publishing Services.

Pudewa, A. (2000). *Teaching writing: Structure and style*. Atascadero, CA: Institute for Excellence in Writing.

### General References Covering Many Sections

- Adams, M. (1990). *Beginning to read: Learning and thinking about print*. Cambridge, MA: MIT Press.
- Allington, R. (Ed.). *Teaching Struggling Readers: Articles from The Reading Teacher*. Newark, DE: International Reading Association.
- Birsh, J. R. (1999). (Ed.). *Multisensory teaching of basic language skills*. Baltimore: Paul H. Brookes Publishing Co.
- Burns, M., Griffin, P., & Snow, C. (Eds.), *Starting Out Right: A Guide to Promoting Children's Reading Success*. Washington, DC: National Academy Press.
- Ehri, L. & Williams, J. (1996). *Learning to read and learning to teach reading*. In F. Murray (Ed.), *The Teacher Educator's Handbook: Building a Knowledge Base for the Preparation of Teachers* (pp. 231-244). San Francisco, CA: Jossey-Bass Publishers.
- McCardle, P. & Chhabra, V. (Eds.). (2004). *The Voice of Evidence in Reading Research*. Baltimore, MD: Brookes.
- National Reading Panel (2000). *Report of the National Reading Panel: Report of the Subgroups*. NICHD Clearinghouse.
- Neuman, S. & Dickinson, D. (2001). *Handbook of Early Literacy Research*. New York: Guilford.
- Shaywitz, S. (2003). *Overcoming dyslexia*. New York: Knopf.
- Snow, C., Burns, M., & Griffin, P. (Eds.), (1998). *Preventing Reading Difficulties in Young Children*. Washington DC: National Academy Press.
- Spear-Swerling, L. & Sternberg, R. (1998). *Off Track: When Poor Readers Become "Learning Disabled."* Boulder, CO: Westview Press.
- Webster, JB, PH. D, (Unknown). *Blended Structure and Style*: [www.writing-edu.com](http://www.writing-edu.com).

## **APPENDIX C: SUPPORT MATERIALS**

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**[WWW.WRITING-EDU.COM](http://WWW.WRITING-EDU.COM)**

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# THE SIX TRAIT WRITING ASSESSMENT

BY ANDREW PUDEWA

Over the past few years, a new model for helping teachers evaluate and coach students' writing has grown very popular, particularly among school districts in the Pacific Northwest. Known as the Six Trait Analytical Writing Assessment Model, this "rubric" is designed to help teachers grade and guide children in six specific areas of writing. These six traits are:

1. Ideas and Content - thoughts and ideas are meaningful, complete
2. Organization - presentation is logical and natural
3. Voice - tone, flavor to the message, sincerity
4. Word Choice - vocabulary is precise, interesting and natural
5. Sentence Fluency - flow & rhythm, strong & varied sentence structure
6. Conventions - grammar, punctuation, capitalization, spelling

A complete and easy to use description of these six traits can be found at the NW Regional Educational Laboratory Web site: <http://www.nwrel.org/eval/index.html>

With these tools, teachers have been able to more fairly evaluate the different aspects of children's work, giving a score of 1-5 for each trait, thus being able to acknowledge their students' strengths as well as helping them to discern weaknesses.

Additionally, the six traits analysis model can help teachers choose good books and good stories as good models for children to read--which will surely affect how they write. Ever searching for a more specific answer to the question, "What makes good writing?", we find a helpful tool in this six trait evaluation model.

Although many teachers have improved in their ability to identify areas of strength and weakness, the question remains, "How can I get my kids to improve in their weak areas?" Unfortunately, the six traits assessment model does not include a clear methodology for teaching to those traits. In fact, some teachers have expressed frustration at knowing what "voice" is, but not having tools to help children develop their "voice." What about the children whose biggest problem is finding "content"? How does one model "organization" for a student? How can they develop better "word choice"?

The Structure & Style Syllabus is a profound support for those teachers using the six traits evaluation. How?

## 1. Ideas & Content:

We clearly know from our success with reluctant writers that having the ability to think of something to write must not be a prerequisite for learning how to write. By having source texts from which to take content, a student can begin developing skills without having to also think up ideas at the same time. As he uses information and stories provided for him, he begins to build confidence. Subsequently he will experiment with variations on that content and ultimately he will be able to bring his own original ideas onto paper. But for many children, and particularly the reluctant ones, developing "ideas and content" must be a gradual and safe process.

## 2. Organization:

Is there a better way to learn to organize one's writing than to follow a model where each paragraph has a specific purpose? Facts are organized by topic. Stories have a sequence. Let students use a model, master a model and finally they will have the ability to be free of the model and stay organized. Our structural Units I-IX provide these very models for teaching "organization."

## 3. Voice:

Children learn to speak their native tongue just like their parents and peers. Individuality, or "voice" will come through the filter of their environment and their past. Until they have a bank of language and life experience upon which to draw, they can "practice" voice by experimenting with different stylistic techniques: adverbs, strong verbs, very short sentences, alliterations, similes, triples, etc. Appropriately, the advanced style checklist can become a tool for "vocalization" practice while a child develops and learns to articulate his own individual "voice."

## 4. Word Choice:

Strong Verbs, Quality Adjectives, Banned word substitutes, "ly" word lists, "My Own Thesaurus" - - all these will strengthen vocabulary and make available a broader range of words to choose from. Will there be awkward usages? Of course. But like practicing a musical instrument, the student improves by doing. Making available a wide range of words in as concrete terms as possible, the most successful teachers will see gradual but continuous improvement in "word choice."

## 5. Sentence Fluency:

This is the one area where our Syllabus in Style can contribute the most. How do you get kids to use a variety of structures? Teach it. Model it. Require it. Even with occasional forced usages, utilizing a checklist with "dress-ups" and sentence openers will almost always create more flowing prose. By eliminating the tedious repetition of subject nouns and pronouns, required adverbial and "who/which" clauses will enable anyone to improve in "sentence fluency."

## 6. Mechanics:

Announce the law: There's no such thing as a first and only draft. By making a habit of always rewriting everything until it all is correct, students will gradually develop the necessary attention to detail about punctuation, capitalization and spelling. Be merciless with your policy and skill in mechanics will follow.

The Six Traits Model has provided many teachers with a better way to evaluate their students' writing. The Structure & Style syllabus gives specific tools to teach those six traits.

During one of the Student Writing Intensive classes last summer, a young girl who attends public school and had been learning about the six traits in her fifth grade class, remarked to her mother, a teacher, "Mr. Pudewa teaches the six traits, he just doesn't know it."

Children often see facts more quickly than we do, and it is indeed clear that the Excellence in Writing syllabus of Structure & Style will support and strengthen the efforts of the many teachers who use the Six Trait Analytical Writing Assessment Model.

# Institute for Excellence in Writing

## Structure & Style: Support for the Six Traits Assessment

*Northwest Regional Educational Laboratory  
Six-Trait Analytical Writing Assessment Model*

Scoring Guide (Rubric) for the Six Traits:  
Compositions are evaluated with a score of 1-5 on each of these criteria for a possible 30 points.

- I. Ideas and Content
- II. Organization
- III. Voice
- IV. Word Choice
- V. Sentence Fluency
- VI. Conventions

### I. Ideas and Content (Development)

**Score of “5” indicates:**

This paper is clear and focused. It holds the reader's attention. Relevant anecdotes and details enrich the central theme or storyline.

- Ideas are fresh and original.
- The student writes from knowledge or experience and shows insight, an understanding of life, and a knack for picking out significant ideas.
- Relevant, quality details give the reader important information that goes beyond the obvious or predictable.
- The writer develops the topic in an enlightening, purposeful way that makes a point or tells a story.
- Every piece adds something to the whole.

**Score of “3” indicates:**

- The writer begins to define the topic, though development is still basic or general.
- The writer's direction is visible but the reader needs more information to “fill in the blanks.”
- The writer draws on knowledge or experience but has difficulty going from generalities to specifics.
- Ideas are reasonably clear, though they may not be detailed, personalized, or expanded enough to show in-depth understanding or a strong sense of purpose.
- The writer attempts support but doesn't go far enough yet in fleshing out the main point or storyline.
- Details often blend the original with the predictable.

*Teaching Writing: Structure & Style  
Syllabus Analysis and Application*

### Structural Units:

- 1. Notetaking & Outlines
- 2. Summarizing from Notes
- 3. Summarizing Narrative Stories
- 4. Summarizing a Reference
- 5. Writing from Pictures
- 6. Using Multiple References
- 7. Creative Writing (writing from own brain)
- 8. Formal Essay
- 9. Critique

### Stylistic Techniques:

- I. “Dress-up” (“ly” word, who/which, strong verb, quality adjective, adverbial clause)
- II. Sentence Openers (subject, prepositional, “ly”, “ing”, clausal, VSS)
- III. Decorations (question, conversation, 3sss, dramatic [VSS], opening/closing, simile/metaphor, alliteration)
- IV. Triple Extensions

### I. Ideas and Content (Development)

Many writing approaches are based on the notion that children's brains are filled with “original” thoughts and that they should have a desire or ability to write these insights down on paper. However, a careful observation of children completely contradicts these ideas. Most children who do write easily will first use facts they have read or been taught; very few can objectively view or describe their opinions or experience.

Writing requires the accurate articulation of formal language patterns, which are acquired mostly through reading, being read to, or spending time in more formal conversation. The ease with which a child can produce “original” content will be directly proportional to his or her language-based perceptions of that information or experience. Consequently, although a child may have had a powerful experience, unless he has an opportunity to translate that experience into a formal language pattern, writing about it will be, as for most children, a difficult if not impossible task. This is why teachers frequently have difficulties using “journals” successfully.



<p>NWREL, cont.</p> <p><b>Score of “1” indicates:</b> As yet, the paper has no clear sense of purpose or central theme. To extract meaning from the text, the reader makes inferences based on sketchy details. The writing reflects any of these problems:</p> <ul style="list-style-type: none"><li>• The writer still needs a topic or hasn’t defined the topic in a meaningful, personal way.</li><li>• Information is very limited or unclear.</li><li>• The text may be repetitious or may read like a collection of disconnected, random thoughts.</li><li>• Everything seems as important as everything else; the reader has a hard time sifting out what’s critical.</li></ul> <p><u>II. Organization</u></p> <p><b>Score of “5” indicates:</b> The organization enhances and showcases the central idea or storyline. The order, structure, and presentation of information compels and moves the reader through the text.</p> <ul style="list-style-type: none"><li>• Details fit where they’re placed; sequencing is logical and effective.</li><li>• An inviting introduction draws the reader in; a satisfying conclusion leaves the reader with a sense of resolution.</li><li>• Pacing is well controlled; the writer knows when to slow down and elaborate and when to pick up the pace and move on.</li><li>• Thoughtful transitions clearly show how ideas connect. Organization flows so smoothly the reader hardly thinks about it.</li></ul> <p><b>Score of “3” indicates:</b> A strong organizational structure moves the reader through the text without undue confusion. However, the paper may still exhibit any of the following problems:</p> <ul style="list-style-type: none"><li>• Though recognizable, the introduction may not create a strong sense of anticipation, and the conclusion may not tie up all loose ends.</li><li>• Sequencing is usually logical, but may be so predictable in places that the structure takes attention away from the content.</li><li>• Pacing is fairly well controlled, though the writer sometimes spurts ahead too quickly or spends too much time on unimportant details.</li><li>• Transitions often work well; at other times, connections between ideas are fuzzy.</li><li>• The organization sometimes supports the main point or storyline; at other times, the reader feels an urge to slip in a transition or move things around.</li></ul>	<p>TWSS, cont.</p> <p>Those children who can, without much assistance, easily create content that is “clear, focused, anecdotal, insightful and purposeful” (criteria from the 6 Traits) almost always use ideas and information that they have read recently, read a lot about because of a strong interest, or have written about previously.</p> <p>Therefore, in equipping children to produce content in their writing, the three most essential activities are:</p> <ul style="list-style-type: none"><li>• Reading—especially non-fiction</li><li>• Formal discussion or narration of content learned in history, science, geography, etc.</li><li>• Frequent practice in writing with meaningful content provided.</li></ul> <p>Units 1-4, 6 and 8 of the Structure &amp; Style syllabus require frequent writing from source texts—both fiction and non-fiction—as a part of cross-subject study. This effectively gives the child experience with information and ideas focused through the formal language patterns, which will be helpful for independently writing with good ideas and strong development.</p> <p><u>II. Organization</u></p> <p>The organization of writing, either fiction or non-fiction, primarily depends upon planning a sequence for the presentation of facts or ideas. Students must consider two basic areas of organization: overall composition and individual paragraph.</p> <p><b>Fiction Compositions</b> Having a model and planning with an outline are absolutely vital. All stories must have three basic components. This “story sequence” is seen in any story writing regardless of length.</p> <ol style="list-style-type: none"><li>1. Establish the characters and setting (mood).</li><li>2. Introduce a problem (want or need) to develop a plot and engage the reader.</li><li>3. Ultimately, resolve the problem (climax) and, in some cases, state the lesson to be learned.</li></ol> <p>All good stories will follow this sequence. In many stories that children write, one of these three pieces may be missing. How can children learn to construct stories that contain all three components? By deliberately modeling their stories after existing stories which contain these components. Summarizing tales like “The Boy Who Cried Wolf” or “The</p>
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NWREL, cont.

**Score of “1” indicates:**

The writing lacks a clear sense of direction. Ideas, details, or events seem strung together in a loose or random fashion—or else there is no identifiable internal structure. The writing reflects more than one of these problems:

- Sequencing needs work.
- There is no real lead to set up what follows and no real conclusion to wrap things up.
- Pacing is awkward; the paper slows to a crawl when the reader wants to get on with it and vice versa.
- Connections between ideas are confusing or missing.
- Organizational problems deter the reader from grasping the main point or storyline.

III. Voice

**Score of “5” indicates:**

The writer speaks directly to the reader in an individualistic, expressive, and engaging way. Clearly, the writer is involved in the text, is sensitive to the needs of an audience, and writes to be read.

- The reader feels a strong interaction with the writer, sensing the person behind the words.
- Tone and voice give flavor to the message and are appropriate for the purpose and audience.
- Narrative writing seems honest, appealing, and written from the heart.
- Expository or persuasive writing reflects a strong commitment to the topic and an effort to bring the topic to life by anticipating the reader's questions and showing why the reader should care or want to know more.

**Score of “3” indicates:**

The writer seems sincere but not fully engaged or involved. The result is pleasant or even personable, but not compelling.

- The writing communicates in an earnest, pleasing manner. Moments here and there surprise, amuse, or move the reader.
- Voice emerges strongly on occasion, then retreats behind general, dispassionate language.
- The writer seems aware of an audience, but often weighs words carefully or discards personal insights in favor of safe generalities.
- The writing hides as much of the writer as it reveals.

TWSS, cont.

Emperor's New Clothes,” a child can easily write an engaging piece. If the student changes the characters or setting but follows a prescribed plot, he or she can creatively expand or vary the storyline but not be completely separated from story sequence. After following model stories several times, the child will be more likely to intuitively understand what he needs for an effective story and thus compose original fiction with better organization.

**Non-Fiction Compositions**

Planning for non-fiction writing includes knowing the length of the required composition. This will determine the number of facts or ideas to include. The number of paragraphs will determine the number of topics, and each paragraph should hold an appropriate number of facts. By using an outline to “pre-write,” “brainstorm,” or plan the number and order of facts, the writer will then have more freedom to attend to the details of style and mechanics. By separating the two activities of thinking (planning what to write) and composing those ideas into sentences, children will be more able to demonstrate a good compositional organization; whereas if they start by writing sentences without notes or planning, they are much more likely to “ramble” and it becomes much harder to reorganize ideas if needed.

**Paragraph Structure**

In Units 3 and 4, students learn that a paragraph has a purpose and is a unit of thought, not just an indentation or semi-random break in the text. With fiction, a paragraph may indicate a new component of the story sequence. With non-fiction, it must indicate a new topic has begun. By using the Topic—Clincher rule (see Unit IV), students create paragraphs which start and end on the same topic. Consequently, their paragraphs are more cohesive and focused. By using a “transitional” clincher, the student establishes a connection to the next topic. Thus paragraphs have clearly defined purposes.

All the units teach different model outlines or “skeletons” upon which to hang ideas. Using these models and following the topic/clinchers guidelines will allow the children to exercise and demonstrate a significantly higher level of organization.

III. Voice

**Q:** How do we help a child learn to speak to the reader in an “expressive, appealing, engaging” way and write “from the heart”?

**A:** Give them a repertoire of stylistic techniques!

NWREL, cont.

**Score of “1” indicates:**

The writer seems indifferent, uninvolved, or distanced from the topic and/or the audience. As a result, the writing is lifeless or mechanical; depending on the topic, it may be overly technical or jargonistic. The paper reflects more than one of the following problems:

- It is hard to sense the writer behind the words. The writer does not reach out to an audience or anticipate their interests and questions.
- The writer speaks in a monotone that flattens all potential highs or lows of the message.
- The writing may communicate on a functional level but does not move or involve the reader.
- The writer does not seem sufficiently at home with the topic to take risks, share personal insights, or make the topic/story personal and real for the reader.

IV. Word Choice

**Score of “5” indicates:**

Words convey the intended message in a precise, interesting and natural way.

- Words are specific and accurate; it is easy to understand just what the writer means.
- The language is natural and never overdone; phrasing is highly individual.
- Lively verbs energize the writing. Precise nouns and modifiers create pictures in the reader's mind.
- Striking words and phrases often catch the reader's eye—and linger in the reader's mind.
- Clichés and jargon are used sparingly and only for effect.

**Score of “3” indicates:**

The language is functional, even if it lacks punch; the reader can easily figure out the writer's general meaning.

- Words are almost always correct and adequate; they simply lack flair.
- Familiar words and phrases communicate, but rarely capture the reader's imagination. Still, the paper may have one or two fine moments.
- Attempts at colorful language come close to the mark but sometimes seem overdone.
- Energetic verbs or picturesque phrases liven things up occasionally.

**Score of “1” indicates:**

The writer struggles with a limited vocabulary, searching for words to convey meaning. The

TWSS, cont.

Compare writing to playing a musical instrument; before we can easily express emotion through music, we must absolutely master the techniques and skills necessary to create a variety of dynamics, phrasing, articulations, etc. We cannot expect artistry, nor can we judge people's musical expression, unless they have the required skills.

Through the Syllabus in Style, children develop fluency with a variety of grammatical constructions which enable them to write ideas and facts in seemingly unique ways. The decorations and triple extensions are particularly useful because they effectively attract the attention of readers and scorers.

- Questions in compositions engage the reader.
- Conversations and quotations add depth.
- Simile and/or metaphor add life and personality.
- Short sentences add drama and pizzazz.
- Alliteration, if not overused, adds poetry and humor.
- Triples (3 phrases, clauses, verbs, adverbs, etc. in one sentence) add sophistication and refinement.

Undeniably, each child's individuality will be reflected in their writing, but only to the degree that they have the experience or tools to do so. Just as the beautiful but untrained human voice can fail to mature to its fullest musical potential, the average but well-trained voice can become a superb musical asset. Writing is the same.

By practicing and becoming fluent with specific stylistic techniques, children will more quickly and easily expand their repertoire and range of expression, finding their own unique and compelling “voice” in writing.

IV. Word Choice

The only way that children can make good word choices is to have abundant words available from which to choose. Not only must they have the words on the “tip of their brain,” they must also have an understanding of nuances of meaning. This means vocabulary development through frequent practice with a wide variety of powerful and descriptive adjectives, verbs, and adverbs.

The “Dress-up” section of the Style Checklist requires a strong verb, quality adjective, and “ly” word in every paragraph the child writes. The “Banned Words List” forces alternate usages and the development of “thesaurus thinking.” The advanced

<p>NWREL, cont.</p> <p>writing reflects more than one of these problems:</p> <ul style="list-style-type: none"><li>• Language is so vague (e.g., She was neat, It was nice, We did lots of stuff) that only the most general message comes through.</li><li>• Persistent redundancy distracts the reader.</li><li>• Jargon or clichés serve as a crutch.</li><li>• Words are used incorrectly, sometimes making the message hard to decipher.</li><li>• Problems with language leave the reader wondering what the writer means to say.</li></ul> <p><u>V. Sentence Fluency</u></p> <p><b>Score of “5” indicates:</b> The writing has an easy flow and rhythm when read aloud. Sentences are well built, with strong and varied structure that invites expressive oral reading.</p> <ul style="list-style-type: none"><li>• Sentences are constructed in a way that helps make meaning clear.</li><li>• Purposeful sentence beginnings show how each sentence relates to and builds upon the one before it.</li><li>• The writing has cadence, as if the writer has thought about the sound of the words as well as the meaning.</li><li>• Sentences vary in length as well as structure.</li><li>• Fragments, if used, add style.</li><li>• Dialogue, if used, sounds natural.</li></ul> <p><b>Score of “3” indicates:</b> The text hums along with a steady beat, but tends to be more pleasant or businesslike than musical, more mechanical than fluid.</p> <ul style="list-style-type: none"><li>• Sentences may not seem artfully crafted or musical, but they are usually grammatical.</li><li>• There is at least some variation in sentence length and structure. Sentence beginnings are NOT all alike.</li><li>• The reader sometimes has to hunt for clues (e.g., connecting words and phrases like however, after a while, on the other hand, for example, next, first of all, later, although, etc.) that show how sentences interrelate.</li><li>• Parts of the text invite expressive oral reading; others may be stiff, awkward, or choppy.</li></ul> <p><b>Score of “1” indicates:</b> The reader has to practice quite a bit in order to give this paper a fair interpretive reading. The writing reflects more than one of the following problems:</p>	<p>TWSS, cont.</p> <p>dress-ups include dual verbs, dual adjectives and dual “ly’s” which further exercise “vocabulary muscles.”</p> <p>By providing lists for the children to easily see and utilize in their daily writing, teachers can help children rapidly gain familiarity and confidence with a much wider vocabulary than daily life and conversation would offer.</p> <p>Since the spelling of difficult or unusual words might hinder a child’s desire to use them, spelling lists that include the posted adverbs and banned word synonyms should be regularly emphasized.</p> <p>Effective word choice will also be a direct result of basic literacy and language exposure. Once again, reading—especially non-fiction—is vital. With children for whom reading is still slow or laborious, high quality audiotapes with stories, histories, and biographies should be introduced. This will help provide exposure to the vocabulary and formal language patterns which are essential for good word choice in writing.</p> <p><u>V. Sentence Fluency</u></p> <p>Left on their own, children will often write compositions that follow a very repetitive pattern of subject-verb-object. Many teachers and parents get frustrated with young students’ writing, which frequently have many sequential sentences which begin with words such as:</p> <p>And they . . . And so he . . . Then she . . . So it . . . So then they . . .</p> <p>This is an enemy of sentence fluency. Another common problem is the run-on sentence, which may include “and” three, four, or even five times in one sentence. When parents and teachers encounter these problems, they want to instruct, “don’t do that,” but the child cannot easily “not do it” unless he learns something to replace the incorrect practice.</p> <p>The “Sentence Openers” section of the Style Checklist teaches and, in fact, requires the use of several very specific alternatives to the “subject first” type of sentence. As children choose a “clausal starter” word and consciously try to use it as the first word in a sentence, the structure changes. Students can simply choose a preposition from an extensive list and try to make their fact or idea fit, creating a different style of sentence. By using an “-ing” or “-ed” (participle) opener, the young writer can often combine two actions into one sentence. Addition-</p>
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<p>NWREL, cont.</p> <ul style="list-style-type: none"><li>• Sentences are choppy, incomplete, rambling or awkward; they need work.</li><li>• Phrasing does not sound natural, the way someone might speak.</li><li>• The reader must sometimes pause or re-read to get the meaning.</li><li>• Many sentences begin the same way—and may follow the same patterns (e.g., subject-verb-object) in a monotonous pattern.</li><li>• Endless connectives (and, and so, but then, because, and then, etc.) create a massive jumble of language in which clear sentence beginnings and endings get swallowed up.</li><li>• The text doesn't invite expressive oral reading.</li></ul> <p><u>VI. Conventions</u></p> <p><b>Score of “5” indicates:</b> The writer demonstrates a good grasp of standard writing conventions (e.g., grammar, capitalization, punctuation, usage, spelling, paragraph-ing) and uses conventions effectively to enhance readability. Errors tend to be so few and so minor that the reader can easily overlook them unless hunting for them specifically.</p> <ul style="list-style-type: none"><li>• Paragraphing tends to be sound and to reinforce the organizational structure.</li><li>• Grammar and usage are correct and contribute to clarity and style.</li><li>• Punctuation is accurate and guides the reader through the text.</li><li>• Spelling is correct, even on difficult words.</li><li>• The writer may manipulate conventions—especially grammar and spelling—for stylistic effect.</li></ul> <p><b>Grades 7 and up only:</b></p> <ul style="list-style-type: none"><li>• The writing is sufficiently long and complex to allow the writer to show skill in using a wide range of conventions.</li><li>• Only light editing would be required to polish the text for publication.</li></ul> <p><b>Score of “3” indicates:</b> The writer shows reasonable control over a limited range of standard writing conventions.</p> <ul style="list-style-type: none"><li>• Conventions are sometimes handled well and enhance readability; at other times, errors are distracting and impair readability.</li><li>• Paragraphing is attempted. Paragraphs sometimes run together or begin in the wrong places.</li><li>• Terminal (end-of sentence) punctuation is usually correct; internal punctuation (commas, apostrophes, semicolons, dashes, colons,</li></ul>	<p>TWSS, cont.</p> <p>ally, placing an “ly” adverb as the first word in the sentence can often make a smooth transition. Very short sentences are important. Sentence styles must vary.</p> <p>Not surprisingly, teachers and parents often appreciate a fluent writing style without recognizing exactly what they like about it. It just “sounds” good. By learning and practicing with a checklist of sentence openers, children will develop not only the ability to manipulate words to fit an assigned sentence pattern, but also a sense of which openers might be most useful or artistic in a given instance. The formula is almost magic.</p> <p>Once students have the ability to use a variety of stylistic techniques, they will be better equipped to evaluate the work of other writers and find out why they like or don't like the way it reads. (You can even learn to analyze and subtly imitate a professor's style, making him think you are a brilliant writer.)</p> <p>Of all the concepts presented in the <i>Teaching Writing: Structure &amp; Style</i> syllabus, the conscious use of a variety of sentence openers is perhaps the most powerful tool in improving writing. It creates superb sentence fluency.</p> <p><b>NOTE:</b> As with any developing skill in life, awkward usages will probably appear when students try to use sentence styles new to them. This is normal. Again comparing writing to music, would a good teacher expect a child to play every note and rhythm perfectly when learning a new piece? Anticipate incorrect and awkward interpretations. Errors in writing that result from trying new techniques provide opportunity for refinement and the more meaningful teaching of grammar in context.</p> <p>Like learning to play the piano or to sing, writing is an art; improvement in ability depends on modeling and practice, practice and refinement.</p> <p><u>VI. Conventions</u></p> <p>Spelling and punctuation should be taught as separate subjects. When using the Structure &amp; Style approach, there is always a first draft and a final copy. Spelling and punctuation are always corrected with the help of the teacher. Creating a habit of always checking and rewriting will strengthen the students sensitivity to correcting, when possible, mistakes with conventions.</p>
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NWREL, cont.

- parentheses) is sometimes missing or wrong.
- Spelling is usually correct or reasonably phonetic on common words.
- Moderate editing would be required to polish the text for publication.

**Score of “1” indicates:**

Errors in spelling, punctuation, usage and grammar, capitalization, and/or paragraphing repeatedly distract the reader and make the text difficult to read. The writing reflects more than one of these problems:

- Paragraphing is missing, irregular, or so frequent that it has no relationship to the organizational structure of the text.
- Errors in grammar or usage are very noticeable, and may affect meaning, while punctuation (including terminal punctuation) is often missing or incorrect.
- Spelling errors are frequent, even on common words. Extensive editing would be required to prepare the composition for publication.

TWSS, cont.

Children can only fully implement their knowledge of spelling, punctuation, and grammar if and when they take time to read what they have written and correct errors. When teachers use a checklist-based system of instruction in writing, the child is forced to read what she has written to assure that every required element is present in the composition. This forces the habit of rereading and self-editing.

*The Teaching Writing: Structure & Style* syllabus provides numerous ways to integrate writing into the study of practically everything—science, history, geography, literature, religion, biography. By using models and checklists for daily writing, teachers and parents will see remarkable results. Instruction and practice with these models and techniques are very effective in helping all students score well when their writing is evaluated by the six traits analysis rubric. It will also be of great help in preparing them for higher education and for life.

The Six-Trait Writing Model was taken from the NWREL web site:

<http://www.nwrel.org/eval/toolkit98/traits/>

## Writing Your Lesson Plans

Fall brings the new school year and, with it, the opportunity to renew one's determination for excellence in teaching writing. Like playing violin or learning to paint, writing is an art which improves only with guided practice. Although many teachers and parents begin the year with grandiose ideas, these can quickly take a back seat to the urgencies of life. Success requires goals, it requires consistency, and it requires timing. With these three basic components, organized lesson plans can make the difference between steady progress through a syllabus or a jerky stop-and-go approach with more “stop” than “go.” Let's plan a bit for this year together.

### *A Primary Goal*

Among the basic goals of the *Teaching Writing: Structure and Style* approach is the need to make writing a part of the study of content subjects, not a subject unto itself. Using material from science, biography, or history books as “source texts,” careful teachers can accentuate or reinforce key ideas while practicing writing techniques like “dress-up” and topic—clinchers in paragraphs. Although many teachers find isolating “ideal” paragraphs for summarizing is difficult, experienced teachers have found that in reality, virtually any paragraph from any page can be used for note-taking and summarizing with the Unit I/II or Unit IV model. To integrate stories with content, how about changing the setting of a myth or fable to reflect the place or time being studied in history or geography? The hare and the tortoise could as easily be set in early America or modern day Africa as in ancient Greece. They could race from Philadelphia to Washington and the hare awakens only to find the capital of the United States has been relocated there! The possibilities are endless. The Unit V model (Writing from Pictures) can work as effectively with describing three photographs depicting stages of embryonic development as it can with a Calvin & Hobbes comic. When in church or Sunday school, take notes and summarize from those notes during the week. A thank you note for gifts and a letter to the editor are excellent opportunities for taking “notes from the brain” as taught in Unit VII. Don't rely on “canned” text; rather, establish a goal to make writing a fundamental part of the study of all subjects.

cont. on A-16

A-15